```
     FILE 'HCAPLUS' ENTERED AT 12:59:36 ON 22 NOV 2010
L2         29088 S L1
L3        497209 S RNA OR RIBONUCLEOTIDE OR RIBONUCLEIC OR OLIGORIBONUCLEOTIDE O
L4       2121088 S ISOLATION OR PURIFICATION OR SEPARATION OR LYSIS OR BINDING
L5           160 S L2 AND L3 AND L4
L6            69 S L5 AND (PY<2002 OR AY<2002 OR PRY<2002)
L7         45434 S LYSIS OR LYSED
L8       1189527 S BINDING OR (SOLID SUPPORT)
L9          5453 S L7 AND L8
L10            5 S L6 AND L9
L11          359 S L3 AND L9
L12      1302623 S (ALKALI METAL) OR LITHIUM OR POTASSIUM OR CESIUM
L13           40 S L11 AND L12
L14           17 S L13 AND (PY<2002 OR AY<2002 OR PRY<2002)
```

```
FILE 'HOME' ENTERED AT 12:58:44 ON 22 NOV 2010

=>  file reg
COST IN U.S. DOLLARS                                    SINCE FILE      TOTAL
                                                           ENTRY    SESSION
FULL ESTIMATED COST                                         0.22       0.22

FILE 'REGISTRY' ENTERED AT 12:59:04 ON 22 NOV 2010
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2010 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.

STRUCTURE FILE UPDATES:   21 NOV 2010  HIGHEST RN 1253900-64-9
DICTIONARY FILE UPDATES:  21 NOV 2010  HIGHEST RN 1253900-64-9

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH June 26, 2010.

  Please note that search-term pricing does apply when
  conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and
predicted properties as well as tags indicating availability of
experimental property data in the original document.  For information
on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=> exp licl/cn
E1            1     LICHUANISININE/CN
E2            1     LICIDRIL/CN
E3            0 --> LICL/CN
E4            1     LICL COMPD. WITH ETHYLALUMINUM DICHLORIDE (1:2)/CN
E5            1     LICOAGROAURONE/CN
E6            1     LICOAGROCARPIN/CN
E7            1     LICOAGROCHALCONE A/CN
E8            1     LICOAGROCHALCONE B/CN
E9            1     LICOAGROCHALCONE C/CN
E10           1     LICOAGROCHALCONE D/CN
E11           1     LICOAGRODIN/CN
E12           1     LICOAGRODIONE/CN

=> exp lithium chloride/cn
E1            1     LITHIUM CHLORATE (LICLO3.1/3H2O)/CN
E2            1     LITHIUM CHLORATE, COMPD. WITH P-DIOXANE (1:1)/CN
E3            1 --> LITHIUM CHLORIDE/CN
E4            1     LITHIUM CHLORIDE (6LI35CL)/CN
E5            1     LITHIUM CHLORIDE (6LI37CL)/CN
E6            1     LITHIUM CHLORIDE (6LICL)/CN
E7            1     LITHIUM CHLORIDE (6LICL), MONOAMMONIATE/CN
E8            1     LITHIUM CHLORIDE (6LICL), MONOHYDRATE/CN
E9            1     LITHIUM CHLORIDE (7LI35CL)/CN
E10           1     LITHIUM CHLORIDE (7LI37CL)/CN
E11           1     LITHIUM CHLORIDE (7LICL)/CN
E12           1     LITHIUM CHLORIDE (7LICL), MONOAMMONIATE/CN

=> s e3
```

```
L1           1 "LITHIUM CHLORIDE"/CN

=> file hcaplus
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                         ENTRY    SESSION
FULL ESTIMATED COST                                       5.99       6.21

FILE 'HCAPLUS' ENTERED AT 12:59:36 ON 22 NOV 2010
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2010 AMERICAN CHEMICAL SOCIETY (ACS)
```



```
FILE COVERS 1907 - 22 Nov 2010  VOL 153 ISS 22
FILE LAST UPDATED: 21 Nov 2010  (20101121/ED)
REVISED CLASS FIELDS (/NCL) LAST RELOADED:  Aug 2010
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE:  Aug 2010

HCAplus now includes complete International Patent Classification (IPC)
reclassification data for the fourth quarter of 2010.
```



```
This file contains CAS Registry Numbers for easy and accurate
substance identification.

=> s l1
L2       29088 L1

=> s RNA or ribonucleotide or ribonucleic or oligoribonucleotide or
polyribonucleotide
        408658 RNA
          8105 RIBONUCLEOTIDE
        195567 RIBONUCLEIC
          1750 OLIGORIBONUCLEOTIDE
           982 POLYRIBONUCLEOTIDE
L3      497209 RNA OR RIBONUCLEOTIDE OR RIBONUCLEIC OR OLIGORIBONUCLEOTIDE OR
               POLYRIBONUCLEOTIDE

=> s isolation or purification or separation or lysis or binding
        309010 ISOLATION
        401192 PURIFICATION
        263044 SEPARATION
         37871 LYSIS
       1180525 BINDING
L4     2121088 ISOLATION OR PURIFICATION OR SEPARATION OR LYSIS OR BINDING

=> s l2 and l3 and l4
L5         160 L2 AND L3 AND L4
```

```
=> s l5 and (PY<2002 or AY<2002 or PRY<2002)
      22007366 PY<2002
       4248856 AY<2002
       3717451 PRY<2002
L6           69 L5 AND (PY<2002 OR AY<2002 OR PRY<2002)

=> d l6 1-69 ti abs bib

L6   ANSWER 1 OF 69  HCAPLUS  COPYRIGHT 2010 ACS on STN
TI   Compositions and methods for using a solid support to purify RNA
AB   The invention concerns a method for purifying substantially pure and
     undegraded RNA from biol. material comprising RNA,
     comprising the steps of: (a) mixing the biol. material with an RNA
     Lysing/ Binding Solution buffered at a pH of greater than about 7,
     the RNA Lysing/Binding Solution comprising an RNA
     -complexing salt; (b) contacting the mixture to a solid support such that
     nucleic acids comprising substantially undegraded RNA in the
     mixture preferentially bind to the solid support; (c) washing the solid
     support with a series of RNA wash solns. to remove biol.
     materials other than bound nucleic acids comprising substantially
     undegraded RNA, wherein the series of wash solns. comprises a
     first wash comprising alc. and an RNA-complexing salt at a
     concentration of at least 1 M and a second wash comprising an alc., buffer and
an
     optional chelator; and (d) preferentially eluting the bound substantially
     undegraded RNA from the solid support with an RNA
     Elution Solution in order to obtain substantially pure and undegraded
     RNA.  Reagents, methods and kits for the purification of RNA
     from biol. materials are provided.
AN   2004:80382  HCAPLUS <<LOGINID::20101122>>
DN   140:107795
TI   Compositions and methods for using a solid support to purify RNA
IN   Bair, Robert Jackson; Heath, Ellen M.; Meehan, Heather; Paulsen, Kim
     Elayne; Wages, John M.
PA   USA
SO   U.S. Pat. Appl. Publ., 19 pp., Cont.-in-part of U.S. Ser. No. 974,798.
     CODEN: USXXCO
DT   Patent
LA   English
FAN.CNT 3
     PATENT NO.          KIND   DATE        APPLICATION NO.         DATE
     ---------------     ----   --------    --------------------    --------
PI   US 20040019196       A1    20040129    US 2003-418194          20030416 <--
     US 7148343           B2    20061212
     US 20030073830       A1    20030417    US 2001-974798          20011012 <--
     CA 2463317           A1    20030424    CA 2001-2463317         20011012 <--
     AU 2002211719        A1    20030428    AU 2002-211719          20011012 <--
     AU 2002211719        B2    20070614
     EP 1438426           A1    20040721    EP 2001-979794          20011012 <--
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
     JP 2005505305         T     20050224    JP 2003-536461          20011012 <--
     JP 3979996           B2    20070919
     AU 2004233035        A1    20041104    AU 2004-233035          20040415 <--
     AU 2004233035        B2    20090723
     CA 2522446           A1    20041104    CA 2004-2522446         20040415
     WO 2004094635        A2    20041104    WO 2004-US12033         20040415
     WO 2004094635        A3    20041216
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
```

```
            GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
            LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
            NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
            TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
        RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
            BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE,
            ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,
            SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN,
            TD, TG
    EP 1618194          A2    20060125    EP 2004-760008         20040415
        R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR
    JP 2006523463       T     20061019    JP 2006-513124         20040415
    US 20050032105      A1    20050210    US 2004-909724         20040802 <--
    US 20070043216      A1    20070222    US 2006-589364         20061030 <--
    US 7767804          B2    20100803
    US 20100160619      A1    20100624    US 2010-718713         20100305 <--
PRAI US 2001-974798     A2    20011012  <--
    AU 2002-211719      A3    20011012  <--
    WO 2001-US32073     W     20011012  <--
    US 2003-418194      A     20030416
    WO 2004-US12033     W     20040415
    US 2004-909724      A3    20040802
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OSC.G   2     THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)
RE.CNT  56    THERE ARE 56 CITED REFERENCES AVAILABLE FOR THIS RECORD
              ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6   ANSWER 2 OF 69  HCAPLUS  COPYRIGHT 2010 ACS on STN
TI   Dicarboxylic acid salt additives which facilitate DNA amplification
AB   Additives for DNA amplification comprising an anion donor (in particular,
     a dicarboxylic acid salt) effective in facilitating the synthesis of DNA
     in an enzymic reaction, are disclosed.  Inorg. salts, alkaline salts, alkaline
     earth salts, or ammonium salts of dicarboxylic acid, such as oxalate ion,
     malonate ion and the maleic acid ion are effective.  The reagent also
     includes primers, RNA or DNA template, reverse transcriptase or
     DNA polymerase, buffers and salts.  Potassium oxalate, sodium oxalate,
     sodium malonate, and sodium maleate were effective in facilitating PCR
     reaction using various types of DNA polymerase.
AN   2003:386157  HCAPLUS <<LOGINID::20101122>>
DN   138:398400
TI   Dicarboxylic acid salt additives which facilitate DNA amplification
IN   Kitabayashi, Masao; Komatsuhara, Shusuke; Nishiya, Yoshiaki; Oka, Masanori
PA   Toyobo Co., Ltd., Japan
SO   Jpn. Kokai Tokkyo Koho, 19 pp.
     CODEN: JKXXAF
DT   Patent
LA   Japanese
FAN.CNT 2
     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
     ---------------     ----   --------    --------------------   --------
PI   JP 2003144169        A     20030520    JP 2001-349173         20011114 <--
     WO 2003042383        A1    20030522    WO 2002-JP11884        20021114 <--
         W:  US
         RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT,
             LU, MC, NL, PT, SE, SK, TR
     EP 1452593           A1    20040901    EP 2002-780096         20021114 <--
     EP 1452593           B1    20090408
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, FI, CY, TR, BG, CZ, EE, SK
     AT 427992            T     20090415    AT 2002-780096         20021114 <--
```

	US 20050069887	A1	20050331	US 2004-495581	20040514 <--
	US 7384739	B2	20080610		
	JP 2008017851	A	20080131	JP 2007-233740	20070910 <--
PRAI	JP 2001-349173	A	20011114 <--		
	JP 2002-311596	A	20021025		
	WO 2002-JP11884	W	20021114		

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L6 ANSWER 3 OF 69 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Nanoparticle-oligonucleotide conjugates, methods of making them and nanostructures, and their use in detecting and separating nucleic acids
AB The invention provides methods of detecting a nucleic acid. The methods comprise contacting the nucleic acid with one or more types of particles having oligonucleotides attached thereto. In one embodiment of the method, the oligonucleotides are attached to nanoparticles and have sequences complementary to portions of the sequence of the nucleic acid. A detectable change (preferably a color change) is brought about as a result of the hybridization of the oligonucleotides on the nanoparticles to the nucleic acid. The invention also provides compns. and kits comprising particles. Also disclosed is a method of separating a selected nucleic acid from other nucleic acids. The invention further provides methods of synthesizing unique nanoparticle-oligonucleotide conjugates, the conjugates produced by the methods, and methods of using the conjugates. In addition, the invention provides nanomaterials and nanostructures comprising nanoparticles and methods of nanofabrication utilizing nanoparticles. Thus, a nanoparticle assembly was prepared using streptavidin complexed to four biotinylated oligonucleotides, oligonucleotide-modified gold nanoparticles, and a linker oligonucleotide complementary to both the streptavidin-associated oligonucleotides and to the oligonucleotides attached to the gold nanoparticles. The chemical and phys. properties of this assembly were studied. The streptavidin was not adsorbed to the gold nanoparticle surface due to the d. of the immobilized oligonucleotides. This experiment therefore points towards a way of specifically immobilizing proteins on nanoparticle surfaces through very specific interactions in a way that will not substantially perturb the activity of the protein.
AN 2003:355707 HCAPLUS <<LOGINID::20101122>>
DN 138:363795
TI Nanoparticle-oligonucleotide conjugates, methods of making them and nanostructures, and their use in detecting and separating nucleic acids
IN Mirkin, Chad A.; Letsinger, Robert L.; Taton, Thomas Andrew; Lu, Gang
PA USA
SO U.S. Pat. Appl. Publ., 196 pp., Cont.-in-part of U.S. Ser. No. 927,777.
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 19

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 20030087242	A1	20030508	US 2001-8978	20011207 <--
	US 6984491	B2	20060110		
	WO 9804740	A1	19980205	WO 1997-US12783	19970721 <--
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW				
	RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				

```
     EP 1818417           A2    20070815    EP 2007-105334         19970721 <--
     EP 1818417           A3    20100120
         R:  CH, DE, ES, FR, GB, IT, LI, SE
     US 6361944           B1    20020326    US 1999-344667         19990625 <--
     US 6506564           B1    20030114    US 2000-603830         20000626 <--
     US 20020155442       A1    20021024    US 2001-760500         20010112 <--
     US 6767702           B2    20040727
     US 20030022169       A1    20030130    US 2001-820279         20010328 <--
     US 6750016           B2    20040615
     US 20020172953       A1    20021121    US 2001-927777         20010810 <--
     CA 2463323           A1    20030501    CA 2002-2463323        20021008 <--
     WO 2003035829        A2    20030501    WO 2002-US32088        20021008 <--
     WO 2003035829        A3    20040826
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
             PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
             UA, UG, US, UZ, VN, YU, ZA, ZM, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
             FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF,
             CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
     AU 2002363062        A1    20030506    AU 2002-363062         20021008 <--
     AU 2002363062        B2    20070322
     US 20030207296       A1    20031106    US 2002-266983         20021008 <--
     US 7169556           B2    20070130
     EP 1478774           A2    20041124    EP 2002-799155         20021008 <--
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK
     JP 2005525084        T     20050825    JP 2003-538330         20021008 <--
     JP 4347049           B2    20091021
     JP 2004194669        A     20040715    JP 2004-35790          20040212 <--
     AU 2004205147        A1    20040916    AU 2004-205147         20040819 <--
     AU 2004205147        B2    20080110
     US 20060068378       A1    20060330    US 2005-50983          20050204 <--
     AU 2007202906        A1    20070712    AU 2007-202906         20070622
     AU 2007203391        A1    20070809    AU 2007-203391         20070719
     JP 2008029351        A     20080214    JP 2007-259861         20071003 <--
     JP 2008067711        A     20080327    JP 2007-264002         20071010 <--
PRAI US 1996-31809P       P     19960729  <--
     WO 1997-US12783      A2    19970721  <--
     US 1999-240755       B2    19990129  <--
     US 1999-344667       A2    19990625  <--
     US 2000-176409P      P     20000113  <--
     US 2000-192699P      P     20000328  <--
     US 2000-200161P      P     20000426  <--
     US 2000-213906P      P     20000626  <--
     US 2000-603830       A2    20000626  <--
     US 2000-224631P      P     20000811  <--
     US 2000-254392P      P     20001208  <--
     US 2000-254418P      P     20001208  <--
     US 2000-255235P      P     20001211  <--
     US 2000-255236P      P     20001211  <--
     US 2001-760500       A2    20010112  <--
     US 2001-820279       A2    20010328  <--
     US 2001-282640P      P     20010409  <--
     US 2001-927777       A2    20010810  <--
     EP 1997-938010       A3    19970721  <--
     JP 1998-508917       A3    19970721  <--
     US 2001-327864P      P     20011009  <--
```

```
     AU 2001-87242         A3    20011101  <--
     US 2001-8978          A     20011207  <--
     AU 2002-256145        A3    20020327
     AU 2002-363062        A3    20021008
     WO 2002-US32088       W     20021008
     JP 2004-35790         A3    20040212
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OSC.G   6     THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD (6 CITINGS)
RE.CNT  132   THERE ARE 132 CITED REFERENCES AVAILABLE FOR THIS RECORD
              ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6   ANSWER 4 OF 69  HCAPLUS  COPYRIGHT 2010 ACS on STN
TI   Methods, reagents and kits for isolating RNA from environmental
     or biological samples
AB   Reagents, methods and kits for the purification of RNA from biol. or
     environmental samples are provided.  The method comprises mixing said
     material with an RNA binding solution buffered at a pH of
     greater than 7 wherein the RNA binding solution comprises
     an RNA complexing salt from from strong chaotropic agents.
     RNA is bound to non-silica solid support selected from cellulose,
     cellulose acetate, nitrocellulose, nylon, polyester, polyethersulfone,
     polyolefin, or polyvinylidene fluoride.  The non-silica solid support is
     contained in a vessel such as centrifuge tubes, spin tubes, syringes,
     cartridges, chambers, multiple well plates and test tubes.
AN   2003:300642  HCAPLUS <<LOGINID::20101122>>
DN   138:317132
TI   Methods, reagents and kits for isolating RNA from environmental
     or biological samples
IN   Heath, Ellen M.; Wages, John M.
PA   USA
SO   U.S. Pat. Appl. Publ., 14 pp.
     CODEN: USXXCO
DT   Patent
LA   English
FAN.CNT 3
     PATENT NO.          KIND   DATE        APPLICATION NO.         DATE
     ----------------    ----   --------    --------------------    --------
PI   US 20030073830       A1    20030417    US 2001-974798          20011012 <--
     CA 2463317           A1    20030424    CA 2001-2463317         20011012 <--
     WO 2003033739        A1    20030424    WO 2001-US32073         20011012 <--
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM,
             HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS,
             LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO,
             RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN,
             YU, ZA, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AM, AZ, BY, KG,
             KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR,
             IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN,
             GQ, GW, ML, MR, NE, SN, TD, TG
     AU 2002211719        A1    20030428    AU 2002-211719          20011012 <--
     AU 2002211719        B2    20070614
     EP 1438426           A1    20040721    EP 2001-979794          20011012 <--
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
     JP 2005505305        T     20050224    JP 2003-536461          20011012 <--
     JP 3979996           B2    20070919
     US 20040019196       A1    20040129    US 2003-418194          20030416 <--
     US 7148343           B2    20061212
     US 20050032105       A1    20050210    US 2004-909724          20040802 <--
     US 20070043216       A1    20070222    US 2006-589364          20061030 <--
```

```
     US 7767804           B2    20100803
     US 20100160619       A1    20100624    US 2010-718713         20100305 <--
PRAI US 2001-974798       A     20011012  <--
     WO 2001-US32073      W     20011012  <--
     US 2003-418194       A2    20030416
     US 2004-909724       A3    20040802
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OSC.G   1     THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L6   ANSWER 5 OF 69  HCAPLUS  COPYRIGHT 2010 ACS on STN
TI   Capture and concentration of nucleic acids on a solid phase for analysis
     and long-term storage
AB   This invention is directed to a process for tightly binding
     nucleic acid to solid phase and corresponding processes for the
     utilization thereof.  Nucleic acid is bound to solid phase matrixes
     exhibiting sufficient hydrophilicity and electropositivity to tightly bind
     the nucleic acids from a sample.  These processes include nucleic acid
     (double or single stranded DNA and RNA) capture from high volume
     and/or low concentration specimens, buffer changes, washes, and volume redns.,
and
     enable the interface of solid phase bound nucleic acid with enzyme,
     hybridization or amplification strategies.  The tightly bound nucleic acid
     may be used, for example, in repeated analyses to confirm results or test
     addnl. genes in both research and com. applications.  Further, a method is
     described for virus extraction, purification, and solid phase amplification
from
     large volume plasma specimens.  Expts. optimizing capture conditions are
     described.  Release of captured nucleic acids for use in genomic anal. is
     demonstrated.
AN   2002:716927  HCAPLUS <<LOGINID::20101122>>
DN   137:228949
TI   Capture and concentration of nucleic acids on a solid phase for analysis
     and long-term storage
IN   Gerdes, John C.; Marmaro, Jeffery M.; Ives, Jeffrey T.; Roehl, Christopher
     A.
PA   Xtrana, Inc., USA
SO   U.S. Pat. Appl. Publ., 43 pp., Cont.-in-part of U.S. 6,291,166.
     CODEN: USXXCO
DT   Patent
LA   English
FAN.CNT 6
     PATENT NO.           KIND   DATE        APPLICATION NO.         DATE
     ---------------      ----   --------    --------------------    --------
PI   US 20020132242        A1    20020919    US 2001-944604          20010831 <--
     US 6872527            B2    20050329
     US 6291166            B1    20010918    US 1998-61757           19980416 <--
     CA 2458664            A1    20030313    CA 2002-2458664         20020816 <--
     WO 2003020981         A1    20030313    WO 2002-US26108         20020816 <--
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
             PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
             UA, UG, UZ, VN, YU, ZA, ZM, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,
             CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
             PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR,
             NE, SN, TD, TG
     AU 2002323198         A1    20030318    AU 2002-323198          20020816 <--
     EP 1432818            A1    20040630    EP 2002-757163          20020816 <--
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
```

IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK

	JP 2005505269	T	20050224	JP 2003-525681	20020816 <--
	US 20040091925	A1	20040513	US 2003-690359	20031021 <--
	US 7087387	B2	20060808		
	US 20060211034	A1	20060921	US 2006-436919	20060518 <--
	US 7361471	B2	20080422		
	US 20090082225	A1	20090326	US 2008-106908	20080421 <--
PRAI	US 1997-41999P	P	19970416 <--		
	US 1998-61757	A2	19980416 <--		
	US 2001-944604	A	20010831 <--		
	WO 2002-US26108	W	20020816		
	US 2003-690359	A3	20031021		
	US 2006-436919	A3	20060518		

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OSC.G 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)
RE.CNT 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 6 OF 69 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Methods and compositions and apparatus for isolation of biological macromolecules
AB The present invention relates generally to compns., methods, and kits for use in clarification and viscosity reduction of biol. samples. More specifically, the invention relates to such compns., methods, and kits that are useful in the isolation of biol. macromols. from cells (e.g., bacterial cells, animals cells, fungal cells, viruses, yeast cells, or plant cells) via lysis and one or more addnl. isolation procedures, such as filtration procedures. In particular, the invention relates to compns., methods, and kits wherein biol. macromols. are isolated using a filter, where the pore size increases in the direction of sample flow. The compns., methods and kits of the invention are suitable for isolating a variety of forms of biol. macromols. from cells. The compns., methods and kits of the invention are particularly well-suited for rapid isolation of nucleic acid mols. from bacterial cells. HeLa cells were disrupted in guanidinium isothiocyanate lysis buffer and transferred to a filter (comprising a first regenerated cellulose layer with a pore size of 0.2 μm and a second high-d. polyethylene layer 1/8 in. thick (comprising two 1/16 in. thick frits) with a 20 μm pore size) contained in a conical housing. This housing was then placed in a 2-mL conical centrifuge tube, and centrifuged for 2 min. An equal volume of 70% EtOH was added to the flow-through and RNA was purified using an RNA-binding cartridge.
AN 2002:637932 HCAPLUS <<LOGINID::20101122>>
DN 137:181887
TI Methods and compositions and apparatus for isolation of biological macromolecules
IN Simms, Domenica; Trinh, Thuan
PA Invitrogen Corporation, USA
SO PCT Int. Appl., 42 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002065125	A1	20020822	WO 2002-US4185	20020213 <--

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,

PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
UA, UG, UZ, VN, YU, ZA, ZM, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,
CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,
BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

AU	2002306474	A1	20020828	AU 2002-306474	20020213 <--
US	20020127587	A1	20020912	US 2002-73260	20020213 <--
PRAI US	2001-268027P	P	20010213 <--		
WO	2002-US4185	W	20020213		

OSC.G 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)
RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 7 OF 69 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Methods and kits for the purification of nucleic acids from bacterial cells using a single reagent containing polyethylene glycol and binding to paramagnetic beads
AB The invention includes reagents and methods for the isolation of nucleic acids. The reagents described herein contain a nucleic acid precipitating agent and a solid phase carrier. The reagents can optionally be formulated to cause the lysis of a cell. These reagents can be used to isolate a target nucleic acid mol. from a cell or a solution containing a mixture of different size nucleic acid mols. In a preferred embodiment plasmid DNA from bacterial cells are purified by precipitation with 1-4% polyethylene glycol (mol. weight of 8000) and 0.5M salt concentration The DNA is further purified by reversible binding to paramagnetic beads that are coated with amine or encapsulated carboxyl groups. The first reagent allows purification of DNA greater than 10 kb, while a second round of purification allows purification of DNA greater than 2.4 kb from a mixture of nucleic acids 7% polyethylene glycol. Magnetic fields of about 1000 G are applied to the wells of a microtiter plate using a magnetic plate holder containing an N35 magnet for removal of paramagnetic beads following DNA purification The disclosed reagents and methods provides a simple, robust and readily automatable means of nucleic acid isolation and purification which produces high quality nucleic acid mols. suitable for: capillary electrophoresis, nucleotide sequencing, reverse transcription cloning the transfection, transduction or microinjection of mammalian cells, gene therapy protocols, the in vitro synthesis of RNA probes, cDNA library construction and PCR amplification.
AN 2002:539860 HCAPLUS <<LOGINID::20101122>>
DN 137:89428
TI Methods and kits for the purification of nucleic acids from bacterial cells using a single reagent containing polyethylene glycol and binding to paramagnetic beads
IN McKernan, Kevin J.
PA Whitehead Institute for Biomedical Research, USA
SO PCT Int. Appl., 45 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2002055727	A2	20020718	WO 2002-US353	20020109 <--
WO 2002055727	A3	20021003		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,

GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT,
RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US,
UZ, VN, YU, ZA, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,
CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,
BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

CA 2433746	A1	20020718	CA 2002-2433746	20020109	<--
AU 2002239826	A1	20020724	AU 2002-239826	20020109	<--
US 20020106686	A1	20020808	US 2002-42923	20020109	<--
EP 1349951	A2	20031008	EP 2002-705692	20020109	<--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR					
US 20060024701	A1	20060202	US 2005-126775	20050511	<--
PRAI US 2001-260774P	P	20010109	<--		
US 2002-42923	B1	20020109			
WO 2002-US353	W	20020109			

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OSC.G 6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD (6 CITINGS)
RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 8 OF 69 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Methods and kits including rRNA-specific probes and primers for determining the presence of Cryptosporidium organisms in a test sample
AB The present invention describes novel oligonucleotides targeted to nucleic acid sequences derived from Cryptosporidium organisms, and Cryptosporidium parvum organisms in particular, which are useful for determining the presence of
Cryptosporidium organisms in a test sample such as water, feces, food or other. The oligonucleotides of the present invention include hybridization assay probes, helper probes and amplification primers. The present invention further describes a novel method for obtaining purified rRNA from viable oocysts.
AN 2002:220853 HCAPLUS <<LOGINID::20101122>>
DN 136:258283
TI Methods and kits including rRNA-specific probes and primers for determining the presence of Cryptosporidium organisms in a test sample
IN Cunningham, Melissa M.; Stull, Paul D.; Weisburg, William G.
PA Gen-Probe Incorporated, USA
SO PCT Int. Appl., 133 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
PI WO 2002022890	A2	20020321	WO 2001-US42192	20010911	<--
WO 2002022890	A3	20030821			
W: AU, CA, JP					
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR					
CA 2419154	A1	20020321	CA 2001-2419154	20010911	<--
AU 2002011814	A	20020326	AU 2002-11814	20010911	<--
US 20020055116	A1	20020509	US 2001-954695	20010911	<--
US 20020146717	A1	20021010	US 2001-954586	20010911	<--
US 7081527	B2	20060725			
EP 1356103	A2	20031029	EP 2001-979893	20010911	<--
EP 1356103	B1	20101020			
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY, TR					

```
     JP 2004527221         T     20040909    JP 2002-527330          20010911 <--
     AT 485391             T     20101115    AT 2001-979893          20010911 <--
     US 20070020661        A1    20070125    US 2006-459885          20060725 <--
     US 7585631            B2    20090908
     AU 2007203610         A1    20070823    AU 2007-203610          20070802 <--
     US 20100003693        A1    20100107    US 2009-555679          20090908 <--
PRAI US 2000-232028P       P     20000912  <--
     AU 2002-11814         A3    20010911  <--
     US 2001-954586        A1    20010911  <--
     WO 2001-US42192       W     20010911  <--
     US 2006-459885        A3    20060725
OSC.G   3     THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)

L6   ANSWER 9 OF 69  HCAPLUS  COPYRIGHT 2010 ACS on STN
TI   Methods and kits for isolating nucleic acids from leukocytes by
     binding to antibodies on a solid support
AB   The present invention relates to a method of isolating nucleic acid from a
     blood sample.  The method involves selectively isolating leukocytes from
     said sample by binding said leukocytes to a solid support containing
     a binding partner specific for the leukocyte, for example an
     antibody.  The antibody can bind an antigen selected from one of more of
     the following: HLA-I, CD11a, CD18, CD45, CD46, CD50, CD82, CD162, CD5 and
     CD15 and a specific example shows a combination of CD45 and CD15.  The
     said leukocytes are lysed in detergents to release nucleic acids which are
     subsequently bound to a second solid support which is neg. charged.  Kits
     for isolating nucleic acid from samples form further embodiments of the
     invention.
AN   2001:904506  HCAPLUS <<LOGINID::20101122>>
DN   136:15912
TI   Methods and kits for isolating nucleic acids from leukocytes by
     binding to antibodies on a solid support
IN   Bergholtz, Stine; Korsnes, Lars; Andreassen, Jack
PA   Dynal Biotech Asa, Norway; Jones, Elizabeth Louise
SO   PCT Int. Appl., 51 pp.
     CODEN: PIXXD2
DT   Patent
LA   English
FAN.CNT 1
     PATENT NO.          KIND   DATE        APPLICATION NO.         DATE
     ---------------     ----   --------    --------------------    --------
PI   WO 2001094572        A1    20011213    WO 2001-GB2472          20010605 <--
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT,
             RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US,
             UZ, VN, YU, ZA, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
             BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     CA 2410888            A1    20011213    CA 2001-2410888         20010605 <--
     CA 2410888            C     20080916
     EP 1290155            A1    20030312    EP 2001-934205          20010605 <--
     EP 1290155            B1    20060809
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
     AU 2001260507         B2    20060831    AU 2001-260507          20010605 <--
     AT 335815             T     20060915    AT 2001-934205          20010605 <--
     ES 2269399            T3    20070401    ES 2001-934205          20010605 <--
     US 20030180754        A1    20030925    US 2003-297301          20030430 <--
     US 20080293035        A1    20081127    US 2008-98411           20080404 <--
```

PRAI GB 2000-13658 A 20000605 <--
WO 2001-GB2472 W 20010605 <--
US 2003-297301 B1 20030430
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OSC.G 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)
RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 10 OF 69 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Protection against lithium and sodium toxicity by manipulating processing of mRNA precursors in yeast and plants
AB This invention describes the identification of pre-mRNA processing as a novel target of environmental stress caused for example by lithium and sodium toxicity. Overexpression of different types of proteins (or protein fragments) from different organisms but all involved in pre-mRNA processing, protects yeast from salt stress, which indicates that any stimulation of this process, independently of its mechanism, may counteract the toxic effects of mineral salts. A similar phenotype of tolerance to NaCl and to LiCl has been observed by overexpression of these types of proteins in transgenic Arabidopsis plants, demonstrating the generality of this protective effect in eukaryotic cells and organisms.
AN 2001:798448 HCAPLUS <<LOGINID::20101122>>
DN 135:340401
TI Protection against lithium and sodium toxicity by manipulating processing of mRNA precursors in yeast and plants
IN Vicente Meana, Oscar; Roldan Medina, Marta; Serrano Salom, Ramon; Forment Millet, Jose Javier; Naranjo Olivero, Miguel Angel
PA Universidad Politecnica de Valencia, Spain
SO PCT Int. Appl., 84 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001081599	A2	20011101	WO 2001-EP4479	20010419 <--
	WO 2001081599	A3	20020516		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	CA 2405138	A1	20011101	CA 2001-2405138	20010419 <--
	EP 1276887	A2	20030122	EP 2001-943269	20010419 <--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
	BR 2001010209	A	20030722	BR 2001-10209	20010419 <--
	JP 2003530887	T	20031021	JP 2001-578670	20010419 <--
	AU 2001265889	B2	20061214	AU 2001-65889	20010419 <--
	CN 100412196	C	20080820	CN 2001-809382	20010419 <--
	CN 101397564	A	20090401	CN 2008-10145975	20010419 <--
	IN 2002MN01424	A	20040911	IN 2002-MN1424	20021016 <--
	MX 2002010404	A	20040906	MX 2002-10404	20021018 <--
	US 20040203157	A1	20041014	US 2002-258148	20021216 <--
	US 7566552	B2	20090728		
	IN 2006MN00303	A	20070824	IN 2006-MN303	20060314 <--
	AU 2007200581	A1	20070301	AU 2007-200581	20070209 <--

```
     US 20100095398       A1    20100415    US 2009-459886         20090709 <--
PRAI ES 2000-1102         A     20000419  <--
     AU 2001-265889       A3    20010419  <--
     AU 2001-65889        A     20010419  <--
     CN 2001-809382       A3    20010419  <--
     WO 2001-EP4479       W     20010419  <--
     IN 2002-MN1424       A3    20021016
     US 2002-258148       A1    20021216
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OSC.G   1     THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)
RE.CNT  2     THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
              ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6   ANSWER 11 OF 69  HCAPLUS  COPYRIGHT 2010 ACS on STN
TI   An improved method to isolate mitochondrial RNA from green plant
     tissue
AB   A modified procedure of mitochondrial RNA (mtRNA)
     isolation based on the combination of RNase A/guanidine
     thiocyanate/CsCl centrifugation, is presented.  Mitochondria are first
     separated from other subcellular components such as nuclei and plastids by
     differential centrifugation of leaf homogenates.  The crude mitochondria
     are further purified by sucrose gradient centrifugation.  To eliminate
     chloroplast RNA (cpRNA), the purified mitochondria are treated
     with RNase A.  Subsequently, RNase A is inactivated and mitochondria are
     lysed by adding guanidine thiocyanate in high concentration  As a strong
protein
     denaturant, guanidine thiocyanate can inactivate nucleases very
     efficiently.  Mitochondrial RNA is pelleted through a CsCl
     gradient.  Finally, copptd., single-stranded DNA in the CsCl gradient can
     be removed from mtRNA by LiCl precipitation  The step-by-step protocols for the
     technique are presented.
AN   2000:299140  HCAPLUS <<LOGINID::20101122>>
DN   133:346730
TI   An improved method to isolate mitochondrial RNA from green plant
     tissue
AU   Ye, Fei; Reski, Ralf
CS   Department of Biology, Massachusetts Institute of Technology, Cambridge,
     MA, USA
SO   Nucleic Acid Protocols Handbook (2000), 23-27.  Editor(s):
     Rapley, Ralph. Publisher: Humana Press Inc., Totowa, N. J.
     CODEN: 68WSAO
DT   Conference
LA   English
RE.CNT  7     THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD
              ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6   ANSWER 12 OF 69  HCAPLUS  COPYRIGHT 2010 ACS on STN
TI   Purification of uncontaminated, intact plant RNA
AB   A simple, reliable and inexpensive method has been recently developed to
     isolate clean leaf RNA with high yield without using the
     time-consuming techniques such as sedimentation in cesium chloride
     gradients.  Plant tissue is ground in buffered guanidinium thiocyanate as
     described by Chomczynski and Sacchi.  After tissue extraction, the homogenates
     are centrifuged at a moderate g force to remove insol. polysaccharides.
     The supernatant is then extracted using acid phenol/chloroform:RNA
     partitions to the aqueous phase, whereas DNA and proteins are present in the
     interphase and the phenol phase.  Most polysaccharides that remain in the
     aqueous phase are then selectively precipitated by potassium acetate and the
     RNA is purified from residual contaminants by lithium chloride
     precipitation  The step-by-step protocols for the technique are presented.
AN   2000:299139  HCAPLUS <<LOGINID::20101122>>
```

DN 133:346729
TI Purification of uncontaminated, intact plant RNA
AU Cheng, Shu-Hua; Moore, Brandon D.; Seemann, Jeffrey R.
CS Department of Molecular Biology, Massachusetts General Hospital, Boston, MA, USA
SO Nucleic Acid Protocols Handbook (2000), 17-22. Editor(s): Rapley, Ralph. Publisher: Humana Press Inc., Totowa, N. J. CODEN: 68WSAO
DT Conference
LA English
RE.CNT 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 13 OF 69 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Isolation and purification of functional total RNA from woody branches and needles of sitka and white spruce
AB The isolation of intact, functional RNA from conifer spp. is not easy, especially from those tissues that are heavily lignified and characterized by a low number of living cells. An efficient procedure for isolating RNA from combined wood and bark tissues of conifers was developed based on a protocol optimized for the extraction of RNA from pollen and one for the isolation of RNA from woody stems. This protocol does not involve the use of phenol, and no ultracentrifugation was required. In addition, the protocol overcame the problems of RNA degradation and low yield due to oxidation by polyphenolics and co-precipitation with polysaccharides, both of which are abundant components in conifer bark tissues. The isolated RNA was of high quality and undegraded as gauged by spectrophotometric readings and electrophoresis in denaturing agarose gels. Quality was further assessed through the subsequent use of the RNA in reverse transcription and RT-PCR, indicating that it could be used for a number of downstream purposes including Northern blot hybridization and cDNA library construction. Using this modified protocol, 80-150 μg of RNA was routinely obtained from 1 g of fresh material. This protocol was also used for the isolation of RNA from needles of spruce spp., from which 750-950 μg RNA per g of starting material could routinely be obtained.
AN 2000:116109 HCAPLUS <<LOGINID::20101122>>
DN 132:290672
TI Isolation and purification of functional total RNA from woody branches and needles of sitka and white spruce
AU Wang, Shawn X.; Hunter, William; Plant, Aine
CS Simon Fraser University, Burnaby, BC, V5A 1S6, Can.
SO BioTechniques (2000), 28(2), 292, 294-296 CODEN: BTNQDO; ISSN: 0736-6205
PB Eaton Publishing Co.
DT Journal
LA English
OSC.G 36 THERE ARE 36 CAPLUS RECORDS THAT CITE THIS RECORD (36 CITINGS)
RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 14 OF 69 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Methods and reagents for preserving RNA in cell and tissue samples
AB This specification relates to the field of mol. biol. and provides novel methods and reagents for preserving and protecting the RNA content of samples from degradation prior to RNA isolation . This preservation may be accomplished without ultra-low temperature storage or disruption of the tissue.
AN 2000:98838 HCAPLUS <<LOGINID::20101122>>

DN 132:105028
TI Methods and reagents for preserving RNA in cell and tissue samples
IN Lader, Eric S.
PA Ambion, Inc., USA
SO PCT Int. Appl., 57 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000006780	A1	20000210	WO 1999-US17375	19990730 <--
	W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW				
	RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	US 6204375	B1	20010320	US 1998-127435	19980731 <--
	CA 2298841	A1	20000210	CA 1999-2298841	19990730 <--
	AU 9954616	A	20000221	AU 1999-54616	19990730 <--
	AU 745943	B2	20020411		
	EP 1019545	A1	20000719	EP 1999-940837	19990730 <--
	EP 1019545	B1	20060111		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, CY				
	JP 2002521071	T	20020716	JP 2000-562562	19990730 <--
	JP 4554080	B2	20100929		
	AT 315665	T	20060215	AT 1999-940837	19990730 <--
	EP 1657313	A2	20060517	EP 2006-216	19990730 <--
	EP 1657313	A3	20070627		
	EP 1657313	B1	20100505		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY				
	ES 2255293	T3	20060616	ES 1999-940837	19990730 <--
	AT 466957	T	20100515	AT 2006-216	19990730 <--
	US 20010016312	A1	20010823	US 2001-771256	20010126 <--
	US 6528641	B2	20030304		
	US 20030114651	A1	20030619	US 2003-354727	20030130 <--
	US 20100028852	A1	20100204	US 2009-534182	20090803 <--
PRAI	US 1998-127435	A2	19980731 <--		
	EP 1999-940837	A3	19990730 <--		
	WO 1999-US17375	W	19990730 <--		
	US 2001-771256	A1	20010126 <--		
	US 2003-354727	B1	20030130		

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OSC.G 18 THERE ARE 18 CAPLUS RECORDS THAT CITE THIS RECORD (22 CITINGS)
RE.CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 15 OF 69 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Three-detergent method for the extraction of RNA from several bacteria
AB We present a three-detergent method that provides a simple and rapid method for the isolation of RNA from several gram-neg. bacterial species. The detergents helped in higher yields, and the acidification with 1 M HCl was observed to reduce the amount of chromosomal DNA carryover, possibly by enhancing the depurination of DNA and its

subsequent partitioning into the acid phenol. This procedure requires few solns., thus minimizing contamination with RNases. Dissoln. of the RNA pellet in formamide/EDTA or 0.05% SDS would serve to inhibit residual RNase activity (if any). In cases in which the RNA is used only for northern blot anal., LiCl precipitation might be the method of choice. The amount of contaminating DNA is sufficiently reduced while it still maintains a decent yield of RNA. Under the more exacting requirements of RT-PCR or primer extension, the extra step of DNaseI treatment would then be a necessity.

AN 1999:808064 HCAPLUS <<LOGINID::20101122>>
DN 132:134269
TI Three-detergent method for the extraction of RNA from several bacteria
AU Kiu, Christopher; Syn, Choong; Teo, Winnie Lilian; Swarup, Sanjay
CS National University of Singapore, Lower Kent Ridge, 117600, Singapore
SO BioTechniques (1999), 27(6), 1140-1141, 1144-1145
CODEN: BTNQDO; ISSN: 0736-6205
PB Eaton Publishing Co.
DT Journal
LA English
RE.CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 16 OF 69 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Solid phase technique for selectively isolating nucleic acids
AB A method of isolating target nucleic acid mols. from a solution comprising a mixture of different size nucleic acid mols., in the presence or absence of other biomols., by selectively facilitating the adsorption of a particular species of nucleic acid mol. to the functional group-coated surface of magnetically responsive paramagnetic microparticles is disclosed. Separation is accomplished by manipulating the ionic strength and polyalkylene glycol concentration of the solution to selectively precipitate, and reversibly adsorb, the target species of nucleic acid mol., characterized by a particular mol. size, to paramagnetic microparticles, the surfaces of which act as a bioaffinity adsorbent for the nucleic acids. The target nucleic acid is isolated from the starting mixture based on mol. size and through the removal of magnetic beads to which the target nucleic acid mols. have been adsorbed. The disclosed method provides a simple, robust and readily automatable means of nucleic acid isolation and purification which produces high quality nucleic acid mols. suitable for: capillary electrophoresis, nucleotide sequencing, reverse transcription cloning the transfection, transduction or microinjection of mammalian cells, gene therapy protocols, the in vitro synthesis of RNA probes, cDNA library construction and PCR amplification.

AN 1999:736906 HCAPLUS <<LOGINID::20101122>>
DN 131:334336
TI Solid phase technique for selectively isolating nucleic acids
IN McKernan, Kevin; McEwan, Paul; Morrison, William
PA Whitehead Institute for Biomedical Research, USA
SO PCT Int. Appl., 46 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9958664	A1	19991118	WO 1999-US10572	19990513 <--

W: CA, JP
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE

```
     US 6534262           B1    20030318    US 1999-311317         19990513 <--
     US 20030235839       A1    20031225    US 2003-346714         20030116 <--
     US 20040214175       A9    20041028
     US 20060003357       A1    20060105    US 2005-129218         20050513 <--
     US 20100121044       A1    20100513    US 2009-490674         20090624 <--
PRAI US 1998-85480P       P     19980514  <--
     US 1999-121779P      P     19990226  <--
     US 1999-311317       A1    19990513  <--
     US 2003-346714       A3    20030116
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OSC.G   11    THERE ARE 11 CAPLUS RECORDS THAT CITE THIS RECORD (12 CITINGS)
RE.CNT  4     THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
              ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6   ANSWER 17 OF 69  HCAPLUS  COPYRIGHT 2010 ACS on STN
TI   Modified nucleoside triphosphates and their synthesis and incorporation
     into gene expression-inhibiting ribozymes
AB   Novel nucleotide triphosphates, methods of synthesis and process of
     incorporating these nucleotide triphosphates into oligonucleotides, and
     isolation of novel nucleic acid catalysts (e.g., ribozymes) are
     disclosed.  Thus, a process for synthesizing pyrimidine triphosphates
     comprises monophosphorylation using a phosphorylating agent (e.g. POCl3)
     and trialkyl phosphate (such as tri-Et phosphate) in the presence of
     dimethylaminopyridine (DMAP).  The presence of DMAP increases the yield
     and decreases the reaction time.  The pyrimidine monophosphate is then
     contacted with a pyrophosphorylating agent such as tributylammonium
     pyrophosphate to prepare the triphosphate.  The incorporation of modified
     nucleosides such as 2'-deoxy-2'-aminocytidine into ribozymes using
     RNA polymerase can be increased by the presence of LiCl, MeOH,
     PEG, PrOH, EtOH, CH3NH2, or Et2O in the reaction mixture  A novel ribozyme
     containing 2'-deoxy-2'-aminocytidine and 2'-deoxy-2'-aminouridine which
     cleaved hepatitis C virus RNA in vivo with IC50 of 5 nM was
     prepared
AN   1999:708899  HCAPLUS <<LOGINID::20101122>>
DN   131:334122
TI   Modified nucleoside triphosphates and their synthesis and incorporation
     into gene expression-inhibiting ribozymes
IN   Beigelman, Leonid; Burgin, Alex; Beaudry, Amber; Karpeisky, Alexander;
     Matulic-Adamic, Jasenka; Sweedler, David; Zinnen, Shawn
PA   Ribozyme Pharmaceuticals, Inc., USA
SO   PCT Int. Appl., 78 pp.
     CODEN: PIXXD2
DT   Patent
LA   English
FAN.CNT 292
     PATENT NO.           KIND   DATE        APPLICATION NO.        DATE
     ---------------      ----   --------    --------------------   --------
PI   WO 9955857           A2     19991104    WO 1999-US9348         19990428 <--
     WO 9955857           A3     20000224
         W:  AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,
             DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG,
             KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX,
             NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT,
             UA, UG, US, UZ, VN, YU, ZW
         RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK,
             ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG,
             CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     AU 9851819           A      19980611    AU 1998-51819          19980112 <--
     AU 729657            B2     20010208
     US 6127535           A      20001003    US 1998-186675         19981104 <--
     CA 2330574           A1     19991104    CA 1999-2330574        19990428 <--
```

```
     AU 9938724           A     19991116    AU 1999-38724          19990428 <--
     AU 751480            B2    20020815
     EP 1073732           A2    20010207    EP 1999-921537         19990428 <--
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, FI
     JP 2002512794        T     20020508    JP 2000-546001         19990428 <--
     EP 1493818           A2    20050105    EP 2004-537            19990428 <--
     EP 1493818           A3    20060215
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, FI, CY
     AU 9939188           A     19990916    AU 1999-39188          19990713 <--
     AU 769175            B2    20040115    AU 2000-56616          20000911 <--
     AU 2002300957        A1    20030220    AU 2002-300957         20020910 <--
     JP 2004147666        A     20040527    JP 2003-429834         20031225 <--
     AU 2006203062        A1    20060810    AU 2006-203062         20060713
     AU 2006203062        B2    20090312
     AU 2006203725        A1    20060914    AU 2006-203725         20060825
     AU 2006203725        B2    20100527
     AU 2006228026        A1    20061102    AU 2006-228026         20061011
PRAI US 1998-83727P       P     19980429  <--
     US 1998-186675       A     19981104  <--
     AU 1995-26422        A3    19950518  <--
     US 1996-623891       A     19960325  <--
     AU 1996-76662        A3    19961025  <--
     US 1997-64866P       P     19971105  <--
     AU 1999-38724        A3    19990428  <--
     EP 1999-921537       A3    19990428  <--
     JP 2000-546001       A3    19990428  <--
     WO 1999-US9348       W     19990428  <--
     AU 2003-216323       A3    20030220
     AU 2003-219817       A3    20030220
     AU 2003-221258       A3    20030220
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OS   MARPAT 131:334122
OSC.G   13    THERE ARE 13 CAPLUS RECORDS THAT CITE THIS RECORD (13 CITINGS)
RE.CNT  7     THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD
              ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6   ANSWER 18 OF 69  HCAPLUS  COPYRIGHT 2010 ACS on STN
TI   Methods for isolation of RNA with high purity
AB   Disclosed is a simple method for isolating high-purity RNA from
     samples such as cells, which method comprises (1) mixing the sample with
     an acidic solution containing chaotropic agents (and Li), a water-soluble
organic
     solvent (e.g. isopropanol), and a RNA-binding carrier;
     (2) separation of the RNA-carrier complex from the aqueous phase; and (3)
     elution and recovery of the RNA from the complex.
     Isolation of RNA from Saccharomyces cerevisiae was
     shown, which comprises (1) dissolving the RNA-containing cell preparation
     supernatant in a Na acetate-buffered solution (pH 3.0) that contains LiCl,
     guanidine HCl, Triton X 100, mercaptoethanol, and EtOH; (2) adsorbing with
     magnetic silica beads (sized 1-10 μm; magnetite 30%); (3) washing the
     beads with a Na acetate-buffered solution (pH 4.0; containing guanidine HCl);
and
     (4) recovering the RNA into the Tris-EDTA buffer solution (pH 8.0).
     The RNA prepared with the method is suitable for the synthesis of
     cDNA.
AN   1999:462731  HCAPLUS <<LOGINID::20101122>>
DN   131:140455
TI   Methods for isolation of RNA with high purity
IN   Kitahayashi, Masao; Kuroita, Toshihiro; Komatsuhara, Shusuke; Kawakami,
```

Fumikiyo; Kawamura, Yoshihisa
PA Toyobo Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 8 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 11196869	A	19990727	JP 1998-7697	19980119 <--
PRAI JP 1998-7697		19980119 <--		

L6 ANSWER 19 OF 69 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Isolation of functional RNA from periderm tissue of potato tubers and sweet potato storage roots
AB A reliable and efficient protocol is given for the isolation of mRNA from the periderm of potato tubers and sweet potato storage roots. The method relies on a urea-based lysis buffer and lithium chloride to concentrate total RNA away from most of the cytoplasmic components and to prevent oxidation of phenolic complexes. To enhance the phys. separation of the RNA from other macromol. components, the RNA fraction was incubated in the presence of the cationic surfactant Catrimox-14. Poly(A)+ mRNA was separated from total RNA and other contaminants by using Promega's MagneSphere technol. The mRNA was suitable for cDNA library construction and RNA fingerprinting.
AN 1999:367870 HCAPLUS <<LOGINID::20101122>>
DN 131:196636
TI Isolation of functional RNA from periderm tissue of potato tubers and sweet potato storage roots
AU Scott, David L., Jr.; Clark, Clarence W.; Deahl, Kenneth L.; Prakash, Channapatna S.
CS Agriculture Research Service, Vegetable Laboratory, US Department of Agriculture, Beltsville, MD, 20705, USA
SO Plant Molecular Biology Reporter (1998), 16(1), 3-8
CODEN: PMBRD4; ISSN: 0735-9640
PB Kluwer Academic Publishers
DT Journal
LA English
OSC.G 7 THERE ARE 7 CAPLUS RECORDS THAT CITE THIS RECORD (7 CITINGS)
RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 20 OF 69 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Preparation of high quality plant RNA with low concentration of guanidinium thiocyanate
AB The guanidinium thiocyanate-LiCl-hot phenol method for high purity and high integrity RNA isolation from plant tissues was established. Comparing with other methods that involved guanidinium thiocyanate, this method costs less and produces RNA mols. with better quality. The working concentration of guanidinium thiocyanate used was reduced more than 40 times compared with previous methods. The isolated RNA with this method gave 4 rRNA (rRNA) bands when analyzed by formaldehyde agarose gel electrophoresis. Northern hybridization, mRNA isolation and following in vitro translation expts. performed with this RNA also gave good results.
AN 1998:610363 HCAPLUS <<LOGINID::20101122>>
DN 130:22443
TI Preparation of high quality plant RNA with low concentration of guanidinium thiocyanate
AU He, Jun-xian; Liang, Hou-guo

CS Dep. of Biology, Sichuan University, Chengdu, 610064, Peop. Rep. China
SO Shengwu Huaxue Yu Shengwu Wuli Jinzhan (1998), 25(4), 379-381
CODEN: SHYCD4; ISSN: 1000-3282
PB Kexue Chubanshe
DT Journal
LA Chinese
OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L6 ANSWER 21 OF 69 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Method for handy rapid isolation of total RNA from cardiac tissue
AB With urea, a kind of protein denaturant and an inhibitor of RNase, and LiCl which can selectively ppts. RNA we extracted total RNA from cardiac tissue. The quantity and quantity of extracted RNA are both satisfactory. No requirement for super-centrifugation and expensive agent such as Guanidinium thiocyanate and guanidine HCl is its advantage. Therefore the reported method is suitable for extraction of RNA in common labs.
AN 1998:379727 HCAPLUS <<LOGINID::20101122>>
DN 129:172661
OREF 129:35025a,35028a
TI Method for handy rapid isolation of total RNA from cardiac tissue
AU Wei, Sainan; Ouyang, Jingping; Wu, Xinxing; Wei, Lei; Liu, Yongming; Dai, Tianli
CS Basic Medical College, Hubei Medical University, Wuhan, 430071, Peop. Rep. China
SO Hubei Yike Daxue Xuebao (1998), 19(1), 93-94
CODEN: HYDXFU; ISSN: 1000-243X
PB Hubei Yike Daxue Xuebao Bianjibu
DT Journal
LA Chinese

L6 ANSWER 22 OF 69 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Optimizing conditions for DNA isolation from Pinus radiata
AB Genomic DNA was isolated from in vitro Pinus radiata seedlings with five DNA isolation protocols commonly used for pines. The methods described by Jobes et al. (1995) and Nelson et al. (1994) utilize SDS, whereas those of Murray and Thompson (1980), Doyle and Doyle (1990), and Devey et al. (1996) use cetyltrimethyl ammonium bromide for cell lysis. The quality and quantity of the isolated DNA was measured and compared. Lithium chloride was found to be more effective than RNase for minimizing the amount of RNA present in the solution Protocols described by Jobes et al. (1995) and Devey et al. (1996) yielded a large quantity of pure DNA which was suitable for restriction enzyme digestion and polymerase chain reaction amplification. With these methods, 37 to 79 μg of DNA with an A260/280 ratio between 1.7 and 1.9 was obtained from 1 g of Pinus radiata seedlings grown in vitro.
AN 1998:377717 HCAPLUS <<LOGINID::20101122>>
DN 129:158821
OREF 129:32265a,32268a
TI Optimizing conditions for DNA isolation from Pinus radiata
AU Ostrowska, Ewa; Muralitharan, Morley; Chandler, Stephen; Volker, Peter; Hetherington, Sandra; Dunshea, Frank
CS Agriculture Victoria, Werribee, 3030, Australia
SO In Vitro Cellular & Developmental Biology: Plant (1998), 34(2), 108-111
CODEN: IVCPEO; ISSN: 1054-5476
PB Society for In Vitro Biology
DT Journal
LA English

OSC.G 9 THERE ARE 9 CAPLUS RECORDS THAT CITE THIS RECORD (9 CITINGS)
RE.CNT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 23 OF 69 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Large and small scale RNA preparations from eukaryotic cells
AB An RNA isolation protocol based on a lithium chloride/urea method (Auffray, C. and Rougeon, F., 1980) is described. The procedure is simple, includes short incubation and reaction times, needs relatively small amts. of cells or tissues, and can be done either on a large scale or as a minipreparation protocol. RNAs are selectively precipitated with lithium chloride, while DNA, polysaccharides and proteins remain in solution; RNases are effectively inhibited by high salt and urea.
AN 1998:376246 HCAPLUS <<LOGINID::20101122>>
DN 129:146520
OREF 129:29807a,29810a
TI Large and small scale RNA preparations from eukaryotic cells
AU Uckert, Wolfgang; Walther, Wolfgang; Stein, Ulrike
CS Department of Molecular and Tumor Therapy, Max-Delbruck-Centre for Molecular Medicine, Berlin, Germany
SO Methods in Molecular Biology (Totowa, New Jersey) (1998), 86(RNA Isolation and Characterization Protocols), 7-14
CODEN: MMBIED; ISSN: 1064-3745
PB Humana Press Inc.
DT Journal
LA English
OSC.G 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)
RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 24 OF 69 HCAPLUS COPYRIGHT 2010 ACS on STN
TI RNA isolation using lithium salts and chaotropic agents prior to carrier adsorption
AB A method for isolating a RNA comprises dissoln. of a sample containing the RNA, such as cells, in an acidic solution containing a lithium salt and a chaotropic agent, bringing the RNA into contact with a nucleic acid-binding carrier such as silica particles, thereby allowing selective adsorption of the RNA alone onto said carrier, and eluting the RNA from the nucleic acid-bound carrier. An acidic soln for dissoln. and adsorption which contains a lithium salt and a chaotropic agent noticeably improved selectivity of the nucleic acid-binding carrier for RNA adsorption, resulting in greater RNA yields. According to the present invention, a high purity RNA can be isolated quickly and safely from a sample containing the RNA. The purified RNA is suitable for cDNA production and amplification via RT-PCR.
AN 1998:116195 HCAPLUS <<LOGINID::20101122>>
DN 128:151432
OREF 128:29749a,29752a
TI RNA isolation using lithium salts and chaotropic agents prior to carrier adsorption
IN Kuroita, Toshihiro; Kamimura, Hideki; Kawakami, Bunsei; Kawamura, Yoshihisa
PA Toyo Boseki K. K., Japan
SO Eur. Pat. Appl., 13 pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

PI EP 818461 A2 19980114 EP 1997-111798 19970711 <--
EP 818461 A3 19990210
EP 818461 B1 20050928
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI
JP 10075784 A 19980324 JP 1997-185032 19970710 <--
JP 3082908 B2 20000904
US 5990302 A 19991123 US 1997-893561 19970711 <--
PRAI JP 1996-183381 A 19960712 <--
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OSC.G 10 THERE ARE 10 CAPLUS RECORDS THAT CITE THIS RECORD (11 CITINGS)

L6 ANSWER 25 OF 69 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Co-isolation of high-quality DNA and RNA from coenocytic green algae
AB A protocol is presented for the simultaneous isolation of DNA and RNA from giant-celled green algae. The protocol first utilizes a combination of SDS and Sarkosyl to achieve solubilization, and proteinase K to destroy nucleases. Next, differential precipitation with LiCl is used to isolated high-mol.-weight RNAs and the supernatant is used to obtain DNA by banding in CsCl. The overall quality of the DNA was examined by the A260/A280 ratio, agarose gel electrophoresis, and restriction enzyme anal. Denaturing gel electrophoresis and cDNA cloning were used to investigate the quality of the RNA. These assays indicated that both the DNA and RNA isolated by this procedure are of high quality, suitable for further mol. analyses. Since many of these algae are slow growing and therefore only a few grams may be available, the isolation of DNA and RNA from the same plant material has obvious advantages.
AN 1997:713444 HCAPLUS <<LOGINID::20101122>>
DN 127:356686
OREF 127:69787a,69790a
TI Co-isolation of high-quality DNA and RNA from coenocytic green algae
AU La Claire, John W., II; Herrin, David L.
CS Department of Botany, University of Texas at Austin, Austin, TX, 78713, USA
SO Plant Molecular Biology Reporter (1997), 15(3), 263-272
CODEN: PMBRD4; ISSN: 0735-9640
PB International Society for Plant Molecular Biology
DT Journal
LA English
OSC.G 16 THERE ARE 16 CAPLUS RECORDS THAT CITE THIS RECORD (16 CITINGS)
RE.CNT 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 26 OF 69 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Method and device for the simultaneous isolation of genomic DNA and high-purity total RNA
AB The invention concerns a method and device for the rapid, simultaneous isolation of genomic DNA (DNA) and cellular total RNA (RNA), free of genomic DNA from various starting materials. The fields of application are mol. biol., biochem., gene technol. (in particular gene therapy), medicine, biomedical diagnosis, veterinary medicine, food anal. and all related fields. The method proposed is characterized in that materials containing DNA and RNA are lysed in a special buffer, the lysate incubated with a mineral carrier, the carrier with the DNA bound to it separated off and washed with buffer solution, and the DNA subsequently separated from the carrier with a buffer of lower salt concentration

The lysate left after separating off the DNA bound to the carrier is mixed with phenol, chloroform and sodium acetate in defined proportions, the phases allowed to sep., and the total RNA precipitated from the aqueous phase by adding isopropanol. Lysis is carried out using buffers containing chaotropic salts with a high ionic strength. Lysis of the material and bonding of the genomic DNA to the carrier are both carried out in the same buffer. Both the lysis of the starting material and all necessary washing steps are carried out in an apparatus which makes it possible to process 12 samples in parallel.

AN 1997:533658 HCAPLUS <<LOGINID::20101122>>
DN 127:187834
OREF 127:36357a,36360a
TI Method and device for the simultaneous isolation of genomic DNA and high-purity total RNA
IN Hillebrand, Timo; Bendzko, Peter
PA Invitek G.m.b.H., Germany; Hillebrand, Timo; Bendzko, Peter
SO PCT Int. Appl., 24 pp.
CODEN: PIXXD2
DT Patent
LA German
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9728171	A1	19970807	WO 1996-DE1291	19960716 <--
	W: CA, JP, RU, US				
	RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	CA 2243829	A1	19970807	CA 1996-2243829	19960716 <--
	CA 2243829	C	20080318		
	EP 880535	A1	19981202	EP 1996-923854	19960716 <--
	EP 880535	B1	20030917		
	R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, LU, NL, SE, FI				
	AT 250073	T	20031015	AT 1996-923854	19960716 <--
	US 6043354	A	20000328	US 1998-101935	19980721 <--
	US 6110363	A	20000829	US 1999-288380	19990408 <--
PRAI	DE 1996-29601618	U	19960131 <--		
	WO 1996-DE1291	W	19960716 <--		

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OSC.G 8 THERE ARE 8 CAPLUS RECORDS THAT CITE THIS RECORD (8 CITINGS)
RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 27 OF 69 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Methods and compositions for isolating nucleic acids
AB Compns. and methods are disclosed for isolating nucleic acids from biol. tissues and cells (including tumor cells) and for tissue/cell solubilization for other mol. biol. uses, wherein the compns. comprise, in part, novel combinations of chaotropic agents and aromatic alcs. which act synergistically to effect better tissue/protein solubilization. The inventive compns. further include aprotic solvents for deactivation of RNases and denaturization of proteins, as well as detergents for enhancing cell lysis and nucleoprotein dissociation The inventive methods also comprise the use of a centrifuge, a solid-support matrix, and a microporous membrane for final isolation of the precipitated nucleic acids, resulting in high yield and purity of the precipitated nucleic acid.
AN 1997:400479 HCAPLUS <<LOGINID::20101122>>
DN 127:78238
OREF 127:14901a,14904a
TI Methods and compositions for isolating nucleic acids
IN Wiggins, James C.
PA USA
SO U.S., 15 pp.

CODEN: USXXAM
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 5637687	A	19970610	US 1993-115184	19930831 <--
PRAI US 1993-115184		19930831 <--		

OSC.G 13 THERE ARE 13 CAPLUS RECORDS THAT CITE THIS RECORD (13 CITINGS)
RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 28 OF 69 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Isolating RNA from clinical samples with Catrimox-14 and lithium chloride
AB RNA is a highly informative mol. that has great potential as a target for diagnostic studies. This potential can be reached only when reliable methods for isolating RNA are available in the clin. environment. Cationic surfactants lyse cells and precipitate nucleic acids. We have described a novel cationic surfactant (tetradecyltrimethylammonium oxalate, Catrimox-14), which is particularly effective in precipitating RNA from cells and which can be applied to clin. specimens. We examine the utility of a method of recovering RNA from the surfactant-nucleic acid precipitate, in which 2 M lithium chloride is used to extract the DNA and surfactant from the precipitate; RNA (being insol. in lithium chloride solution) remains in the pellet. The yield of RNA from peripheral blood mononuclear cells by the Catrimox-LiCl method we describe was the same yield by a conventional method using guanidine thiocyanate, phenol, and chloroform (GPC). The quality of the RNA , judged by agarose gel electrophoresis, A260/280 ratio and its ability to serve as a target for reverse transcription and PCR, was the same. RNA was isolated and amplified from blood stored for at least 2 wk in Catrimox solution at room temperature RNA was also easily isolated with the Catrimox-LiCl method in good yield from frozen sections of mouse liver, spleen, kidney and brain, and from core biopsies of liver and kidney. RNA isolated from needle aspirates of liver, spleen, kidney, pancreas, and brain was easily amplified by RT-PCR. The Catrimox-LiCl method is simple and does not call for the use of corrosive reagents. The Catrimox-LiCl method removes 98% of the DNA. We conclude that the Catrimox-LiCl method is suitable for use in clin. applications of RNA-based diagnosis.
AN 1997:336930 HCAPLUS <<LOGINID::20101122>>
DN 127:31113
OREF 127:5925a,5928a
TI Isolating RNA from clinical samples with Catrimox-14 and lithium chloride
AU Macfarlane, Donald E.; Dahle, Christopher E.
CS Department of Medicine, University of Iowa College of Medicine, Iowa City, IA, 52242, USA
SO Journal of Clinical Laboratory Analysis (1997), 11(3), 132-139
CODEN: JCANEM; ISSN: 0887-8013
PB Wiley-Liss
DT Journal
LA English
OSC.G 9 THERE ARE 9 CAPLUS RECORDS THAT CITE THIS RECORD (9 CITINGS)
RE.CNT 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 29 OF 69 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Chaotropic agent-based solutions and their use in the isolation

of DNA, RNA and proteins

AB Solns. and methods are disclosed for the effective, simple isolation/extraction of DNA, RNA and proteins from a single biol. material sample, such as cells, tissues and biol. fluids. The preferred solns. include effective amts. of a chaotropic agent(s), buffer, reducing agent, and may or may not include an organic solvent. Genomic DNA and total RNA can be isolated utilizing the solns. and methods of the invention in as little as 20 min, and proteins in as little as 30 min. P0 cells (10^8) were lysed in 10 mL of a solution of guanidine thiocyanate 4 M, isopropanol 17 vol %, sodium acetate 0.1 M, 2-aminoethanethiol hydrochloride 0.1 M, and Sarkosyl 0.2%, pH 7.0 in water. Total RNA was sedimented by centrifugation (10,000+g, 8 min at room temperature). The RNA was shown to contain undegraded mRNA for a number of proteins specific to the P0 cells. DNA was recovered from the supernatant by spooling from the interface with isopropanol and proteins were recovered by precipitation with an excess of isopropanol.

AN 1997:204259 HCAPLUS <<LOGINID::20101122>>

DN 126:183524

OREF 126:35377a,35380a

TI Chaotropic agent-based solutions and their use in the isolation of DNA, RNA and proteins

IN Chomczynski, Piotr

PA Chomczynski, Piotr, USA

SO PCT Int. Appl., 33 pp.
CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9705248	A2	19970213	WO 1996-US11875	19960718 <--
	WO 9705248	A3	19970306		
	W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE				
	RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA				
	US 5945515	A	19990831	US 1995-509164	19950731 <--
	AU 9665480	A	19970226	AU 1996-65480	19960718 <--
	EP 843724	A2	19980527	EP 1996-925355	19960718 <--
	EP 843724	B1	20040512		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	AT 266723	T	20040515	AT 1996-925355	19960718 <--
PRAI	US 1995-509164	A	19950731 <--		
	WO 1996-US11875	W	19960718 <--		

OSC.G 22 THERE ARE 22 CAPLUS RECORDS THAT CITE THIS RECORD (26 CITINGS)

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 30 OF 69 HCAPLUS COPYRIGHT 2010 ACS on STN

TI Method for the simultaneous isolation of genomic DNA and highly purified total RNA

AB The invention concerns the rapid simultaneous isolation of genomic DNA and cellular total RNA, free from genomic DNA, from different starting materials (e.g., <105 cells or <1 mg tissue sample). Applications of the method are in mol. biol., biochem., genetic techniques, medicine, veterinary medicine, and related areas. In the method, the DNA- and RNA-containing materials are lysed with a

special buffer, the lysate for isolation of the genomic DNA is incubated with a nonporous highly-dispersed SiO2 support, the support with the bound DNA is separated by centrifugation and washed with buffer solution, and then the DNA is released from the support with a low-salt-concentration buffer. The lysate, after separation of the support-fixed DNA, is mixed with specified amts. of PhOH, CHCl3, and NaOAc, and after phase separation, the cellular total RNA is precipitated out of the aqueous phase by addition of iso-PrOH. Lysis is done with buffers containing chaotropic salts of higher ionic strength. Lysis of the material and binding of genomic DNA to the support are done with the same buffer. An example is given of the isolation of DNA and total RNA from a eukaryotic monolayer cell culture with about 5 + 106 cells.

AN 1996:563526 HCAPLUS <<LOGINID::20101122>>
DN 125:190022
OREF 125:35466h,35467a
TI Method for the simultaneous isolation of genomic DNA and highly purified total RNA
IN Hillebrand, Timo; Bendzko, Peter; Peters, Lars-Erik
PA Invitek Gmbh, Germany
SO Ger. Offen., 4 pp.
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI DE 19506887	A1	19960822	DE 1995-19506887	19950217 <--
DE 19506887	C2	19991014		
PRAI DE 1995-19506887		19950217 <--		

OSC.G 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)
RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 31 OF 69 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Monoamine oxidase gene transcription in human cell lines: Treatment with psychoactive drugs and ethanol
AB In the present study transcriptional activities has been measured with different fragments of the 5'-flanking sequence of the human monoamine oxidase (MAO) genes linked to human growth hormone which was used as a reporter gene. SH-SY5Y neuroblastoma cells and 1242 MG glioma cells were compared under basal conditions as well as after treatments with different drugs. Under basal conditions, the relative reporter activities of the different promoter fragments were similar for both cell lines. No changes in promoter activities, were observed when cells were treated with L-deprenyl, lithium chloride or raclopride. In contrast, increases (2-3-fold) in both reporter gene expression and enzyme activity were observed after ethanol treatment of cells transfected with MAO-B fragments. Gel retardation anal. showed that ethanol caused changes in transcription factor binding to the MAO-B core promoter in both the SH-SY5Y and 1242 MG cell lines in a cell-type specific fashion.
AN 1996:532476 HCAPLUS <<LOGINID::20101122>>
DN 125:187431
OREF 125:34907a,34910a
TI Monoamine oxidase gene transcription in human cell lines: Treatment with psychoactive drugs and ethanol
AU Ekblom, J.; Zhu, Q. -S.; Chen, K.; Shih, J. C.
CS School Pharmacy, University Southern California, Los Angeles, CA, USA
SO Journal of Neural Transmission (1996), 103(6), 681-692
CODEN: JNTRF3; ISSN: 0300-9564
PB Springer

DT Journal
LA English
OSC.G 11 THERE ARE 11 CAPLUS RECORDS THAT CITE THIS RECORD (11 CITINGS)

L6 ANSWER 32 OF 69 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Purification of nucleic acids from solution without precipitation by binding to a solid phase
AB A method of separating polynucleotides, such as DNA, RNA and PNA, from solution by reversibly and non-specifically binding them to a solid surface, such as a magnetic microparticle, with a functional group-coated surface is disclosed. The salt and polyalkylene glycol concentration of the solution is adjusted to levels which result in polynucleotide binding to the magnetic microparticles. The magnetic microparticles with bound polynucleotides are separated from the solution and the polynucleotides are eluted from the magnetic microparticles. The method is generally applicable to large and small nucleic acids and works with crude prepns. such as cleared lysates. Material can be selectively eluted from the particles by controlling the ionic strength of the elution buffer.
AN 1996:350414 HCAPLUS <<LOGINID::20101122>>
DN 125:5056
OREF 125:1147a,1150a
TI Purification of nucleic acids from solution without precipitation by binding to a solid phase
IN Hawkins, Trevor
PA Whitehead Institute for Biomedical Research, USA
SO PCT Int. Appl., 38 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9609379	A1	19960328	WO 1995-US11839	19950919 <--
	W: CA, JP				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	US 5705628	A	19980106	US 1994-309267	19940920 <--
	IL 115352	A	20090211	IL 1995-115352	19950919 <--
	US 5898071	A	19990427	US 1998-2412	19980102 <--
PRAI	US 1994-309267	A	19940920 <--		

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OSC.G 29 THERE ARE 29 CAPLUS RECORDS THAT CITE THIS RECORD (32 CITINGS)
RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 33 OF 69 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Universal process for isolating and purifying nucleic acids from extremely small amounts of various highly contaminated starting materials
AB A universal process is disclosed for extracting and purifying nucleic acids from extremely small amts. of various highly contaminated biol. and other starting materials. The invention has applications in forensic medicine, medical diagnosis, mol. biol., biochem., genetic technol. and all related fields. The process is characterized in that nucleic acid-containing materials are lysed, the lysate is incubated with a nonporous, non-structured, highly disperse, homogeneous and chemical pure SiO2 substrate, the substrate is isolated with the bound nucleic acids and washed with a buffer solution, then the nucleic acids are released from the substrate with a buffer with a lower salt concentration Lysis of the material and nucleic acid immobilization are preferably carried out in a

reaction vessel. The substrate particles have a size of 7-40 nm, preferably 40 nm, and a sp. surface of 50-300 g/m2, preferably 50 g/m2.

AN 1996:89343 HCAPLUS <<LOGINID::20101122>>
DN 124:111769
OREF 124:20719a,20722a
TI Universal process for isolating and purifying nucleic acids from extremely small amounts of various highly contaminated starting materials
IN Hillebrand, Timo; Bendzko, Peter; Peters, Lars-Erik
PA Invitek GmbH, Germany; Hillebrand Timo
SO PCT Int. Appl., 27 pp.
CODEN: PIXXD2
DT Patent
LA German
FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9534569	A1	19951221	WO 1995-DE787	19950614 <--
	W: JP, KR, US				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	DE 4422040	A1	19951221	DE 1994-4422040	19940614 <--
	DE 4422044	A1	19951221	DE 1994-4422044	19940614 <--
	DE 4447015	A1	19960704	DE 1994-4447015	19941230 <--
	DE 4447015	C2	19970911		
	EP 765335	A1	19970402	EP 1995-921702	19950614 <--
	EP 765335	B1	19990901		
	R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, LU, NL, SE				
	JP 10501246	T	19980203	JP 1996-501476	19950614 <--
	JP 3761573	B2	20060329		
	US 6037465	A	20000314	US 1996-780091	19961216 <--
PRAI	DE 1994-4422040	A	19940614 <--		
	DE 1994-4422044	A	19940614 <--		
	DE 1994-4447015	A	19941230 <--		
	WO 1995-DE787	W	19950614 <--		

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OSC.G 23 THERE ARE 23 CAPLUS RECORDS THAT CITE THIS RECORD (25 CITINGS)
RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 34 OF 69 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Chromatographic purification and separation of nucleic acid mixtures
AB Nucleic acids are separated and purified from a nucleic acid mixture by adsorption from a high-ionic-strength aqueous solution containing 1-50 volume% C1-5 aliphatic alc., PEG, hydrophobic inorg. and/or organic polymer, and/or Cl3CCO2H onto a porous or nonporous mineral carrier comprising a metal oxide, silica gel, glass, or zeolite, washing the adsorbent, and eluting with a solution of lower ionic strength. Thus, a tissue sample was homogenized in a solution containing 4-8M chaotropic salt (e.g. guanidine-HCl, guanidine isothiocyanate, NaI), an organic solvent (e.g. PhOH, CHCl3, Et2O), and detergent, digested with protease, mixed. with 0.5 volume 95-100% aliphatic alc. or PEG, and centrifuged, and the supernatant was passed through an appropriate membrane or gel matrix which was washed with an aqueous solution containing 100 mM NaCl, 10 mM Tris-HCl (pH 7.5), and 30-80% alc. or PEG to remove impurities. Nucleic acids were then eluted with 10 mM Tris-HCl (pH 9.0) or distilled water for use in PCR.
AN 1995:341134 HCAPLUS <<LOGINID::20101122>>
DN 122:101132
OREF 122:18935a,18938a
TI Chromatographic purification and separation of nucleic acid mixtures

IN Feuser, Petra; Hermann, Ralf; Schorr, Joachim; Colpan, Metin; Bastian, Helge
PA Diagen Institut fuer Molekularbiologische Diagnostik GmbH, Germany
SO Ger. Offen., 9 pp.
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 4321904	A1	19950112	DE 1993-4321904	19930701 <--
	CA 2142910	A1	19950112	CA 1994-2142910	19940624 <--
	CA 2142910	C	20020827		
	WO 9501359	A1	19950112	WO 1994-EP2056	19940624 <--
	W: CA, JP, US				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	EP 658164	A1	19950621	EP 1994-922869	19940624 <--
	EP 658164	B1	20010404		
	R: AT, BE, CH, DE, DK, ES, FR, GB, IE, IT, LI, NL, PT, SE				
	JP 08501321	T	19960213	JP 1994-503247	19940624 <--
	AT 200293	T	20010415	AT 1994-922869	19940624 <--
	ES 2155477	T3	20010516	ES 1994-922869	19940624 <--
	PT 658164	E	20010928	PT 1994-922869	19940624 <--
	US 6383393	B1	20020507	US 1996-392882	19960315 <--
PRAI	DE 1993-4321904	A	19930701 <--		
	WO 1994-EP2056	W	19940624 <--		

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OSC.G 23 THERE ARE 23 CAPLUS RECORDS THAT CITE THIS RECORD (25 CITINGS)

L6 ANSWER 35 OF 69 HCAPLUS COPYRIGHT 2010 ACS on STN
TI RNA analysis using miniprep RNA in reverse transcription PCR
AB Anal. of gene expression on the RNA level in different in vitro systems is often an important part of gene regulation research and also of gene transfer and gene therapeutic investigations. The isolation of total cellular RNA and the purification of mRNA has been described in a great variety of protocols. However, these protocols are often associated with time-consuming effort and the need for relatively large nos. of cells. To minimize these disadvantages in RNA anal., the authors have developed a mini-preparation protocol for isolation of total cellular RNA from eukaryotic cells using the LiCl-precipitation of RNA, which does not significantly precipitate DNA or protein.
AN 1995:115984 HCAPLUS <<LOGINID::20101122>>
DN 122:152478
OREF 122:28021a,28024a
TI RNA analysis using miniprep RNA in reverse transcription PCR
AU Walther, Wolfgang; Stein, Ulrike; Eder, Claudine
CS Max-Delbrueck-Center Molecular Medicine, Berlin, Germany
SO BioTechniques (1994), 17(4), 674-5
CODEN: BTNQDO; ISSN: 0736-6205
DT Journal
LA English
OSC.G 21 THERE ARE 21 CAPLUS RECORDS THAT CITE THIS RECORD (21 CITINGS)

L6 ANSWER 36 OF 69 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Isolation of RNA from floral tissue of Rumex acetosa (Sorrel)
AB Flower tissue of Rumex acetosa was previously intractable for the isolation of RNA using standard methods, due probably to its high level of polysaccharides. Extraction at low pH, precipitation of polysaccharides

with potassium acetate followed by precipitation of RNA with lithium chloride yielded high-quality RNA that was suitable for Northern hybridization, in-vitro translation, poly(A)+ RNA selection, and subsequent cDNA synthesis.

AN 1994:675935 HCAPLUS <<LOGINID::20101122>>
DN 121:275935
OREF 121:50263a,50266a
TI Isolation of RNA from floral tissue of Rumex acetosa (Sorrel)
AU Ainsworth, Charles
CS Wye College, University of London, Kent, TN25 5AH, UK
SO Plant Molecular Biology Reporter (1994), 12(3), 198-203
CODEN: PMBRD4; ISSN: 0735-9640
DT Journal
LA English
OSC.G 21 THERE ARE 21 CAPLUS RECORDS THAT CITE THIS RECORD (21 CITINGS)

L6 ANSWER 37 OF 69 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Isolation of RNA using quaternary amine surfactants
AB A novel method for isolating RNA from biol. samples, most particularly blood, using quaternary amine surfactants . The RNA is isolated quickly and in sufficient quantity and quality for use in methods including reverse transcriptase and polymerase chain reaction. The quaternary ammonium salts (R1)(R2)(R3)(R4)N+.X- (R1, R2, R3, R4 each independently C1-20 alkyl, C6-26 optionally substituted aryl; X- = preferably phosphate, sulfate, formate, acetate, propionate, oxalate, malonate, succinate, citrate) lyse cells efficiently and also precipitate RNA directly from the lysate. The detergent is then extracted from the precipitate by washing with a concentrated LiCl solution and the RNA then redissolved using water or aqueous formamide. Tetradecyltrimethylammonium oxalate was prepared from tetradecyltrimethylammonium bromide by conversion to the hydroxide and neutralization with oxalate. A series of analogs were also prepared and their performance in the lysis of whole blood and the precipitation of RNA were studied. Optimization expts. and the use of the quaternary ammonium salts in a number of applications of isolated RNA are described.

AN 1994:648039 HCAPLUS <<LOGINID::20101122>>
DN 121:248039
OREF 121:45139a,45142a
TI Isolation of RNA using quaternary amine surfactants
IN Macfarlane, Donald E.
PA University of Iowa Research Foundation, USA
SO PCT Int. Appl., 38 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9418156	A1	19940818	WO 1994-US680	19940112 <--
	W: AU, CA, JP				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	US 5300635	A	19940405	US 1993-13419	19930201 <--
	AU 9462305	A	19940829	AU 1994-62305	19940112 <--
	JP 08506340	T	19960709	JP 1994-518065	19940112 <--
	JP 3615545	B2	20050202		
PRAI	US 1993-13419	A	19930201 <--		
	US 1993-113727	A	19930827 <--		
	WO 1994-US680	W	19940112 <--		

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OS MARPAT 121:248039

OSC.G 7 THERE ARE 7 CAPLUS RECORDS THAT CITE THIS RECORD (7 CITINGS)
RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 38 OF 69 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Simultaneous and rapid purification of total cytoplasmic RNA and genomic DNA from small numbers of transfected mammalian cells
AB A protocol by using 4 mol/L LiCl phasing the DNA and RNA could lead to simultaneous and rapid purification of total cytoplasmic RNA and genomic DNA from small nos. of transfected mammalian cells. Comparing with other methods, this protocol shows rapid, easy and economic, and can be used in many aspects especially in the studies of mammalian cell gene expression and regulation.
AN 1994:625726 HCAPLUS <<LOGINID::20101122>>
DN 121:225726
OREF 121:41021a,41024a
TI Simultaneous and rapid purification of total cytoplasmic RNA and genomic DNA from small numbers of transfected mammalian cells
AU Zhang, Hongquan; Wang, Huixin; Zhou, Tingchong; Wang, Yunling
CS Inst. Bas. Med. Sci., Acad. Mil. Med. Sci., Beijing, 100850, Peop. Rep. China
SO Shengwu Huaxue Yu Shengwu Wuli Jinzhan (1994), 21(2), 165-6
CODEN: SHYCD4; ISSN: 1000-3282
DT Journal
LA Chinese

L6 ANSWER 39 OF 69 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Effects of chronic lithium and carbamazepine treatment on G-protein subunit expression in rat cerebral cortex
AB Although lithium and carbamazepine (CBZ) are effective in the treatment of bipolar affective disorder, their mechanism of action is still unknown. Recent evidence suggests that lithium and CBZ might exert their therapeutic effects by modulating the function of guanosine triphosphate (GTP)-regulatory (G) proteins associated with central nervous system second messenger systems. In the present study, the authors showed that chronic lithium administration decreases Gαs, Gαi1, and Gαi2 mRNA abundance by 25%-30% in rat cerebral cortex. However, the levels of Gαs, Gαi1, and Gαi2 mRNA were unaffected by chronic CBZ treatment. The effects of lithium on Gαs, Gαi1, and Gαi2 mRNA levels appear to be selective, as the mRNA levels of Gαo, Gαx, Gβ1, Gβ2, and Gβ3 subunits remained unchanged. Two days after terminating chronic lithium treatment, changes in Gαs, Gαi1, and Gαi2 mRNA levels were not demonstrable. Short-term administration of lithium (2 days), however, reduced only the Gαi2 mRNA levels. Surprisingly, there was no significant difference in the amount of immunol. detectable Gαs-s, Gαs-l, Gαi(1 + 2), Gαo, and Gβ(1 + 2) in the cortex of rats chronically treated with lithium or CBZ, compared with controls. These data suggest that the effects of chronic lithium on Gαs, Gαi1, and Gαi2 mRNA levels are not shared by CBZ, although both treatments are known to be efficacious in bipolar effective disorder. Furthermore, the data suggest that lithium may modify G-protein functionality through the regulation of the genes expressing G-protein isoforms. However, this effect on G-protein expression appears complex and may be accompanied by compensatory posttranslational regulation of G-protein turnover.
AN 1994:95559 HCAPLUS <<LOGINID::20101122>>
DN 120:95559
OREF 120:16795a,16798a

TI Effects of chronic lithium and carbamazepine treatment on G-protein subunit expression in rat cerebral cortex
AU Li, Peter P.; Young, Trevor; Tam, Ying K.; Sibony, David; Warsh, Jerry J.
CS Sect. Biochem. Psychiatry, Clarke Inst. Psychiatry, Toronto, ON, M5T 1R8, Can.
SO Biological Psychiatry (1993), 34(3), 162-170
CODEN: BIPCBF; ISSN: 0006-3223
DT Journal
LA English
OSC.G 29 THERE ARE 29 CAPLUS RECORDS THAT CITE THIS RECORD (29 CITINGS)

L6 ANSWER 40 OF 69 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Long-term biphasic effects of lithium treatment on phospholipase C-coupled M3-muscarinic acetylcholine receptors in cultured cerebellar granule cells
AB The authors have studied the long-term effects of lithium on neuronal morphol. and the functional expression of phospholipase C-coupled m3-muscarinic acetylcholine receptors (mAChRs) in cerebellar granule cells. There was a biphasic dose-dependent effect on cell morphol. following treatment with lithium for 7 days. At low concns. (≤2 mM), this drug elicited an increase in the number and thickness of connecting nerve fibers, and the size of neuronal aggregates. At high concns. (5-10 mM), lithium induced a severe deterioration of cell morphol., which ultimately resulted in neuronal death. Carbachol-induced phosphoinositide (PI) turnover was similarly affected by lithium treatment with a significant potentiation at concns. up to 2 mM and a marked inhibition at doses higher than 5 mM due to lithium-induced neurotoxicity. The biphasic effect on mAChR-mediated PI hydrolysis was associated with corresponding changes in the maximal extent of carbachol-induced inositol phosphate accumulation, and was accompanied by similar changes in [3H]N-methyl-scopolamine binding to mAChRs and the levels of mRNAs for m3-mAChR and c-Fos. The up-regulation of m3-mAChR mRNA induced by low concns. of lithium was associated with a down-regulation of m2-mAChR mRNA and no change in either total RNA or β-actin mRNA. Lithium's effects on m2- and m3-mAChR mRNAs were time-dependent, requiring a pretreatment time of ≥3 days. The biphasic effect was also demonstrated by the binding of [3H]ouabain to Na+, K+-ATPase, which was shown to be a convenient method for quantifying viable neurons. The neurotoxic effect induced by treatment with high concns. of lithium was not prevented by known neuroprotective/neurotrophic substances such as 9-amino-tetrahydroacridine or N-methyl-D-aspartate, or the co-presence of excess myo-inositol. Since the neurotrophic influences was induced by concns. of lithium which overlap the clin. dose range and require long-term treatment, this effect might be relevant to the efficacy of this drug in the treatment of manic-depressive illness.
AN 1993:225499 HCAPLUS <<LOGINID::20101122>>
DN 118:225499
OREF 118:38719a,38722a
TI Long-term biphasic effects of lithium treatment on phospholipase C-coupled M3-muscarinic acetylcholine receptors in cultured cerebellar granule cells
AU Gao, Xiao Ming; Fukamauchi, Fumihiko; Chuang, De Maw
CS Biol. Psychiatry Branch, Natl. Ment. Health, Bethesda, MD, 20892, USA
SO Neurochemistry International (1993), 22(4), 395-403
CODEN: NEUIDS; ISSN: 0197-0186
DT Journal
LA English
OSC.G 17 THERE ARE 17 CAPLUS RECORDS THAT CITE THIS RECORD (17 CITINGS)

L6 ANSWER 41 OF 69 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Chronic lithium regulates the expression of adenylate cyclase and Gi-protein α subunit in rat cerebral cortex
AB A possible role for adenylate cyclase and guanine nucleotide-

binding proteins (G proteins) in contributing to the chronic actions of Li on brain function was investigated in rat cerebral cortex. Chronic treatment of rats with Li (with therapeutically relevant serum levels of ≈1 mM) increased levels of mRNA and protein for the calmodulin-sensitive (type 1) and calmodulin-insensitive (type 2) forms of adenylate cyclase and decreased levels of mRNA and protein for the inhibitory G-protein subunits Giα1and Giα2. Chronic Li did not alter levels of other G-protein subunits, including Goα, Gsα, and Gβ. Li regulation of adenylate cyclase and Giα was not seen in response to short-term Li treatment (with final serum levels of ≈1 mM) or in response to chronic treatment at a lower dose of Li (with serum levels of ≈0.5 mM). Up-regulation of adenylate cyclase and down-regulation of Giα could represent part of the mol. mechanism by which Li alters brain function and exerts its clin. actions in the treatment of affective disorders.

AN 1992:34440 HCAPLUS <<LOGINID::20101122>>
DN 116:34440
OREF 116:5713a,5716a
TI Chronic lithium regulates the expression of adenylate cyclase and Gi-protein α subunit in rat cerebral cortex
AU Colin, Sam F.; Chang, Ho Choong; Mollner, Stefan; Pfeuffer, Thomas; Reed, Randall R.; Duman, Ronald S.; Nestler, Eric J.
CS Sch. Med., Yale Univ., New Haven, CT, 06508, USA
SO Proceedings of the National Academy of Sciences of the United States of America (1991), 88(23), 10634-7
CODEN: PNASA6; ISSN: 0027-8424
DT Journal
LA English
OSC.G 59 THERE ARE 59 CAPLUS RECORDS THAT CITE THIS RECORD (59 CITINGS)

L6 ANSWER 42 OF 69 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Rapid isolation of plasmid DNA by lithium chloride-ethidium bromide treatment and gel filtration
AB A simple and rapid plasmid DNA purification method was established. Crude plasmid DNA prepns. are treated with 4 M LiCl in the presence of 0.6 mg/mL ethidium bromide to precipitate RNA and proteins contained in the DNA prepns. After removal of RNA and protein ppts., the supernatant is filtered through a Sepharose CL6B column to remove low-mol.-weight contaminants. This procedure takes only 30 min and provides pure plasmid DNA prepns. that consist mainly of covalently closed circular plasmid DNA but have no detectable RNA and protein. The purified DNA prepns. are susceptible to various six- and four-base-recognition restriction endonucleases, T4 DNA ligase, the Klenow fragment of DNA polymerase I, and T7 and Taq DNA polymerase. Since no special equipment is needed for this purification method, 20 or more samples of microgram to milligram levels can be treated in parallel.
AN 1991:602551 HCAPLUS <<LOGINID::20101122>>
DN 115:202551
OREF 115:34465a,34468a
TI Rapid isolation of plasmid DNA by lithium chloride-ethidium bromide treatment and gel filtration
AU Kondo, Toshihiko; Mukai, Masanori; Kondo, Yoichi
CS Inst. Endocrinol., Gunma Univ., Maebashi, 371, Japan
SO Analytical Biochemistry (1991), 198(1), 30-5
CODEN: ANBCA2; ISSN: 0003-2697
DT Journal
LA English
OSC.G 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)

L6 ANSWER 43 OF 69 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Tumor necrosis factor-induced interleukin-6 expression and cytotoxicity

follow a common signal transduction pathway in L929 cells
AB Interleukin (IL)-6 gene induction was studied in response to treatment with tumor necrosis factor (TNF) in the sensitive murine L929 cell line. Under conditions where TNF-mediated cytotoxicity was either increased or decreased, depending on addition of activators or inhibitors, it was found that the TNF-induced IL6 gene expression was likewise enhanced or repressed. Thus, the signal (or part of the signals) going to the nucleus and responsible for gene activation is conducted along the reaction mechanism leading to cellular toxicity.
AN 1991:533779 HCAPLUS <<LOGINID::20101122>>
DN 115:133779
OREF 115:22908h,22909a
TI Tumor necrosis factor-induced interleukin-6 expression and cytotoxicity follow a common signal transduction pathway in L929 cells
AU Vandevoorde, Veronique; Haegeman, Guy; Fiers, Walter
CS Lab. Mol. Biol., State Univ., Ghent, 9000, Belg.
SO Biochemical and Biophysical Research Communications (1991), 178(3), 993-1001
CODEN: BBRCA9; ISSN: 0006-291X
DT Journal
LA English
OSC.G 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)

L6 ANSWER 44 OF 69 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Simultaneous isolation of total cellular RNA and DNA from tissue culture cells using phenol and lithium chloride [Erratum to document cited in CA114(21):202952v]
AB An error in the text has been corrected The error was not reflected in the abstract or the index entries.
AN 1991:509834 HCAPLUS <<LOGINID::20101122>>
DN 115:109834
OREF 115:18733a,18736a
TI Simultaneous isolation of total cellular RNA and DNA from tissue culture cells using phenol and lithium chloride [Erratum to document cited in CA114(21):202952v]
AU Raha, Sandeep; Merante, Frank; Proteau, Gerald; Reed, Juta K.
CS Erindale Coll., Univ. Toronto, Mississauga, ON, L5L 1C6, Can.
SO Genetic Analysis: Techniques and Applications (1991), 8(2), 81
CODEN: GATAEV; ISSN: 1050-3862
DT Journal
LA English

L6 ANSWER 45 OF 69 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Isolation of nucleic acids from plants by differential solvent precipitation
AB The purification of nucleic acids from plant tissue is often made difficult by the presence of contaminating carbohydrate polymers and polyphenols. A procedure for the simultaneous isolation of DNA and translatable RNA from plants is described. The method removes most of the polysaccharides and polyphenols extracted with nucleic acids in a single step by taking advantage of differences in solubility of these compds. in the solvent 2-butoxyethanol. Stepwise addition of 2-butoxyethanol to phenol exts. of specific ionic strength ppts. nucleic acids largely free of contaminants. Subsequent separation of RNA from DNA by precipitation with LiCl was optimized to give a high recovery of translationally active RNA. Successful isolation of nucleic acids from strawberry (Fragaria + ananassa) receptacle, a particularly recalcitrant tissue, and from a range of tissues of other plant species demonstrates the general applicability of the method.
AN 1991:445525 HCAPLUS <<LOGINID::20101122>>
DN 115:45525

OREF 115:7829a,7832a
TI Isolation of nucleic acids from plants by differential solvent precipitation
AU Manning, Kenneth
CS Dep. Plant Physiol., Inst. Hortic. Res., West Sussex, UK
SO Analytical Biochemistry (1991), 195(1), 45-50
CODEN: ANBCA2; ISSN: 0003-2697
DT Journal
LA English
OSC.G 137 THERE ARE 137 CAPLUS RECORDS THAT CITE THIS RECORD (137 CITINGS)

L6 ANSWER 46 OF 69 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Simultaneous isolation of total cellular RNA and DNA from tissue culture cells using phenol and lithium chloride
AB A rapid procedure for the isolation of intact total cellular RNA from cultured cells is described. This method combines the simultaneous disruption of cells and extraction of nucleic acids in a single step with the use of phenol and a buffer containing 100 mM LiCl. Total cellular RNA can be isolated in approx. 2 h. The yield and quality of the RNA is comparable to the more widely employed methods requiring extensive preparatory steps such as extraction using guanidinium thiocyanate and subsequent CsCl gradient centrifugation. The RNA isolated using this procedure contains transcripts up to 10 kilobases in length and is suitable for Northern anal. This procedure also yields high-mol.-weight DNA, which is a suitable substrate for restriction endonucleases.
AN 1991:202952 HCAPLUS <<LOGINID::20101122>>
DN 114:202952
OREF 114:34121a,34124a
TI Simultaneous isolation of total cellular RNA and DNA from tissue culture cells using phenol and lithium chloride
AU Raha, Sandeep; Merante, Frank; Proteau, Gerald; Reed, Juta K.
CS Erindale Coll., Univ. Toronto, Mississauga, ON, L5L 1C6, Can.
SO Genetic Analysis: Techniques and Applications (1990), 7(7), 173-7
CODEN: GATAEV; ISSN: 1050-3862
DT Journal
LA English
OSC.G 19 THERE ARE 19 CAPLUS RECORDS THAT CITE THIS RECORD (19 CITINGS)

L6 ANSWER 47 OF 69 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Lithium decreases Gs, Gi-1 and Gi-2 α-subunit mRNA levels in rat cortex
AB The effects of chronic LiCl treatment (0.2% in diet for 21 days) on brain cortical levels of mRNA for the x-subunit of the GTP-binding proteins Gs, Gi-1, and Gi-2 were studied in rats. The Li treatment decreased all 3 mRNA levels. G-proteins may be a mol. target for the therapeutic effects of Li and may be involved in the pathophysiol. of manic-depressive disorders.
AN 1991:178299 HCAPLUS <<LOGINID::20101122>>
DN 114:178299
OREF 114:29879a,29882a
TI Lithium decreases Gs, Gi-1 and Gi-2 α-subunit mRNA levels in rat cortex
AU Li, Peter P.; Tam, Ying Kee; Young, L. Trevor; Warsh, Jerry J.
CS Clarke Inst. Psychiatry, Univ. Toronto, Toronto, ON, M5T 1R8, Can.
SO European Journal of Pharmacology, Molecular Pharmacology Section (1991), 206(2), 165-6
CODEN: EJPPET; ISSN: 0922-4106
DT Journal
LA English

OSC.G 37 THERE ARE 37 CAPLUS RECORDS THAT CITE THIS RECORD (37 CITINGS)

L6 ANSWER 48 OF 69 HCAPLUS COPYRIGHT 2010 ACS on STN
TI An improvement of the single-step method of RNA isolation by acid guanidinium thiocyanate-phenol-chloroform extraction
AB A modification of the method for RNA isolation using guanidinium thiocyanate, phenol, and chloroform for extraction of RNA from fresh or cultured mammary tissue is described. LiCl was included in the extraction step to solubilize contaminating polysaccharides.
AN 1990:213401 HCAPLUS <<LOGINID::20101122>>
DN 112:213401
OREF 112:35953a,35956a
TI An improvement of the single-step method of RNA isolation by acid guanidinium thiocyanate-phenol-chloroform extraction
AU Puissant, Claudine; Houdebine, Louis Marie
CS Unite Differ. Cell., Inst. Natl. Rech. Agron., Jouy-en-Josas, 78350, Fr.
SO BioTechniques (1990), 8(2), 148-9
CODEN: BTNQDO; ISSN: 0736-6205
DT Journal
LA English
OSC.G 341 THERE ARE 341 CAPLUS RECORDS THAT CITE THIS RECORD (342 CITINGS)

L6 ANSWER 49 OF 69 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Acridinium ester labelling and purification of nucleotide probes
AB A method for attaching acridinium esters to nucleic acid probes uses high (0.1-50 mM) acridinium ester concns. achieved using organic solvent in concns. of 20-80% by volume, and may be carried out either in solution, or with one or the other of the acridinium ester or the probe suspended in solution Purification (the separation of labeled probe from unlabeled probe and free label) involves (1) first removing most of the free acridinium ester label from probe using rapid separation techniques (e.g. precipitation, gel filtration, extraction) and (2) removing substantially all remaining free label from the probe and separating labeled probe for unlabeled probe with specific applications of ion-exchange, reversed phase or hydroxyapatite HPLC. A terminal amine linker (prepared from 6-aminohexanol, S-ethyltrifluorothioacetate, and phosphatidic acid) was attached to a resin-bound synthetic oligonucleotide, which was then cleaved, purified by electrophoresis and chromatog. on Sephadex G-25, and labeled with 4-(2-succinimidyloxycarbonyl ethyl)phenyl-10-methylacridinium-9-carboxylate 25 mM in DMSO and HEPES. Unreacted label was quenched with 5-fold excess lysine, and the labeled probe was purified by EtOH precipitation followed by ion-exchange HPLC on Nucleogen-DEAE 60-7.
AN 1990:175252 HCAPLUS <<LOGINID::20101122>>
DN 112:175252
OREF 112:29535a,29538a
TI Acridinium ester labelling and purification of nucleotide probes
IN Arnold, Lyle John; Nelson, Norman Charles
PA ML Technology Ventures, L. P., USA
SO PCT Int. Appl., 38 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 8902896	A1	19890406	WO 1988-US3361	19881005 <--
W: AU, DK, FI, JP, KR, NO, US				

```
     AU 8825542           A     19890418    AU 1988-25542          19881005 <--
     AU 619223            B2    19920123
     EP 312248            A2    19890419    EP 1988-309283         19881005 <--
     EP 312248            A3    19910109
     EP 312248            B2    19940810
         R:  AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE
     JP 02502283          T     19900726    JP 1988-508511         19881005 <--
     CA 1314009           C     19930302    CA 1988-579422         19881005 <--
     ES 2056937           T3    19941016    ES 1988-309283         19881005 <--
     JP 11322782          A     19991124    JP 1999-48756          19881005 <--
     US 5185439           A     19930209    US 1988-332939         19881212 <--
     FI 8902692           A     19890601    FI 1989-2692           19890601 <--
     DK 8902678           A     19890801    DK 1989-2678           19890601 <--
     KR 9705899           B1    19970421    KR 1989-70991          19890603 <--
PRAI US 1987-105080       A2    19871005  <--
     JP 1988-508511       A3    19881005  <--
     WO 1988-US3361       A     19881005  <--
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OS   MARPAT 112:175252
OSC.G   6     THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD (7 CITINGS)
RE.CNT  4     THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
              ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6   ANSWER 50 OF 69  HCAPLUS  COPYRIGHT 2010 ACS on STN
TI   Simultaneous purification of DNA and RNA from small
     numbers of eukaryotic cells
AB   An extraction procedure for the simultaneous isolation of RNA
     and DNA from tissue culture cells is described.  The procedure is a
     variation of the guanidinium/LiCl method for RNA
     isolation which is rapid, simple, and avoids costly
     ultracentrifugation equipment.  The genomic DNA yielded by this procedure
     is >50 kb in length and may be readily cleaved by restriction
     endonucleases.  Sufficient DNA for Southern blot anal., and RNA
     for Northern blot or nuclease protection anal., can be obtained from as
     few as 2 + 106 cells, making this method particularly suitable for
     the genetic screening of large nos. of individual, stably transfected cell
     clones.
AN   1989:570539  HCAPLUS <<LOGINID::20101122>>
DN   111:170539
OREF 111:28321a,28324a
TI   Simultaneous purification of DNA and RNA from small
     numbers of eukaryotic cells
AU   Karlinsey, Joyce; Stamatoyannopoulos, George; Enver, Tariq
CS   Dep. Med., Univ. Washington, Seattle, WA, 98195, USA
SO   Analytical Biochemistry (1989), 180(2), 303-6
     CODEN: ANBCA2; ISSN: 0003-2697
DT   Journal
LA   English
OSC.G   16    THERE ARE 16 CAPLUS RECORDS THAT CITE THIS RECORD (16 CITINGS)

L6   ANSWER 51 OF 69  HCAPLUS  COPYRIGHT 2010 ACS on STN
TI   A method for isolation of RNA from Pneumocystis
     carinii
AB   Total RNA from P. carinii obtained directly from rat lung and
     from short-term culture on A549 cells was evaluated for size and purity.
     An isolation procedure using guanidine isothiocyanate and LiCl
     was preferable to a hot phenol method.  Host cells were eliminated by
     hypotonic lysis and a series of microfiltrations.  P. carinii
     were pretreated with Zymolyase for increased susceptibility to chaotropic
     agents.  The major ribosomal species of P. carinii RNA migrated
     similarly to Saccharomyces cerevisiae rRNA.  The 28 S-like species
```

migrated well ahead of rat and A549 cell rRNA and well behind the prokaryotic large rRNA species.
AN 1989:474262 HCAPLUS <<LOGINID::20101122>>
DN 111:74262
OREF 111:12439a,12442a
TI A method for isolation of RNA from Pneumocystis carinii
AU Cushion, Melanie T.; Blase, Maria Airo; Walzer, Peter D.
CS Veteran's Adm. Med. Cent., Cincinnati, OH, 45220, USA
SO Journal of Protozoology (1989), 36(1), 12S-14S
CODEN: JPROAR; ISSN: 0022-3921
DT Journal
LA English
OSC.G 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)

L6 ANSWER 52 OF 69 HCAPLUS COPYRIGHT 2010 ACS on STN
TI The separation into fractions of the nucleic acids from plants infected with the potato spindle-tuber viroid by cetyltrimethylammonium bromide
AB A proposed new method of enriching total low-mol.-weight nucleic acid fraction with viroid RNA is by precipitation with cetylmethylammonium bromide (I) from solns. of varying strengths of LiCl. A 0.5% I solution in presence of 0.5M LiCl preferentially ppts. DNA. The viroid RNA ppts. at 0.4M LiCl. Low-mol.-weight RNA is precipitated at much lower concentration of LiCl. Fractionation increases viroid RNA content by 6-fold in total nucleic acid fraction. Total fractionation procedure is schematically represented and discussed.
AN 1989:36435 HCAPLUS <<LOGINID::20101122>>
DN 110:36435
OREF 110:6017a,6020a
TI The separation into fractions of the nucleic acids from plants infected with the potato spindle-tuber viroid by cetyltrimethylammonium bromide
AU Kastal'eva, T. B.; Mozhaeva, K. A.
CS USSR
SO Biologicheskie Nauki (Moscow) (1988), (10), 101-5
CODEN: BINKBT; ISSN: 0470-4606
DT Journal
LA Russian

L6 ANSWER 53 OF 69 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Preparation of RNA from cotton leaves and pollen
AB The title procedure is based on the use of low temps. and avoidance of PhOH or other organic denaturants during the initial extns. These extns. are an optimized modification of the rapid DNA preparation method that uses SDS and sequential KOAc and iso-PrOH pptns. of the supernatant. Subsequent purification of RNA is achieved by LiCl and KOAc pptns. Yields of RNA are 400 μg/g fresh weight leaf tissue and 900 μg/g dry weight pollen, which are at least 90% of their measured RNA contents. The RNA is intact and hybridizable when blotted and the procedure is applicable to other plant species.
AN 1989:20766 HCAPLUS <<LOGINID::20101122>>
DN 110:20766
OREF 110:3485a,3488a
TI Preparation of RNA from cotton leaves and pollen
AU Hughes, D. Wayne; Galau, Glenn
CS Dep. Bot., Univ. Georgia, Athens, GA, 30602, USA
SO Plant Molecular Biology Reporter (1988), 6(4), 253-7
CODEN: PMBRD4; ISSN: 0735-9640
DT Journal
LA English

OSC.G 59 THERE ARE 59 CAPLUS RECORDS THAT CITE THIS RECORD (59 CITINGS)

L6 ANSWER 54 OF 69 HCAPLUS COPYRIGHT 2010 ACS on STN
TI A procedure for the small-scale isolation of plant RNA suitable for RNA blot analysis
AB A small-scale method for the isolation of total RNA from plant tissue is described. The method provides RNA of suitable quantity and quality from 0.2 g fresh tissue for the detection of mRNA species by RNA blot anal. The entire procedure is adapted to 1.5-mL microfuge tubes and takes <5 h. This method is well suited for the isolation of RNA from large nos. of samples or from samples of limited quantity.
AN 1988:434828 HCAPLUS <<LOGINID::20101122>>
DN 109:34828
OREF 109:5833a,5836a
TI A procedure for the small-scale isolation of plant RNA suitable for RNA blot analysis
AU Wadsworth, Gregory J.; Redinbaugh, Margaret G.; Scandalios, John G.
CS Dep. Genet., North Carolina State Univ., Raleigh, NC, 27695-7614, USA
SO Analytical Biochemistry (1988), 172(1), 279-83
CODEN: ANBCA2; ISSN: 0003-2697
DT Journal
LA English
OSC.G 90 THERE ARE 90 CAPLUS RECORDS THAT CITE THIS RECORD (90 CITINGS)

L6 ANSWER 55 OF 69 HCAPLUS COPYRIGHT 2010 ACS on STN
TI A rapid and inexpensive method for preparing E. coli plasmid-DNA
AB A simple, rapid, and inexpensive scaled-up miniprep procedure for preparing pure Escherichia coli plasmid DNA is described. Cells were subjected to a boiling procedure and high-mol.-weight RNA was removed by LiCl precipitation Residual RNA and proteins were removed by subsequent treatment with RNase A and proteinase K/SDS, resp., followed by Sephadex G 50 and Sepharose 6B Cl chromatog. The average yield from a 100 mL overnight bacteria suspension was 100-150 μg for pBR322 DNA and 250-500 μg for SP-6-derived recombinant plasmids. In addition, the described scaled-up preparation does not require CsCl-ethidium bromide centrifugation; pure plasmid DNA can be prepared within 1-2 days.
AN 1986:494061 HCAPLUS <<LOGINID::20101122>>
DN 105:94061
OREF 105:15137a,15140a
TI A rapid and inexpensive method for preparing E. coli plasmid-DNA
AU Monstein, Hans Jurg; Geijer, Thomas
CS Dep. Pharmacol., Univ. Uppsala, Uppsala, 751 24, Swed.
SO Biochemistry International (1986), 12(6), 889-96
CODEN: BIINDF; ISSN: 0158-5231
DT Journal
LA English

L6 ANSWER 56 OF 69 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Stepwise dissociation of yeast 60S ribosomal subunits by lithium chloride and identification of L25 as a primary 26S rRNA binding protein
AB Treatment of yeast 60 S ribosomal subunits with 0.5M LiCl was found to remove all but 6 of the ribosomal proteins. The proteins remaining associated with the (26 S + 5.8 S) rRNA complex were identified as L4, L8, L10, L12, L16, and L25. These core proteins were split off sequentially in the order (L16 + L12), L10, (L4 + L8), L25 by further increasing the LiCl concentration At 1.0M LiCl, only ribosomal protein L25 remains bound to the rRNA. On lowering the LiCl concentration, the core proteins reassoc. with the rRNA in the reverse order of their removal. The susceptibility of the ribosomal proteins to removal by LiCl corresponds quite well with their

order of assembly into the 60 S subunit in vivo as determined earlier (Kruiswijk, T., et al, 1978). Binding studies in vitro using partially purified L25 showed that this protein binds specifically to 26 S rRNA. Therefore, these expts. for the 1st time directly identify a eukaryotic ribosomal protein capable of binding to high-mol.-mass rRNA. Binding studies in vitro using a blot technique demonstrated that core proteins L8 and L16 as well as protein L21, though not present in any of the core particles, are also capable of binding to 26 S rRNA to approx. the same extent as L25. About 9 addnl. 60 S proteins appeared to interact with the 26 S rRNA, though to a lesser extent.

AN 1984:606353 HCAPLUS <<LOGINID::20101122>>
DN 101:206353
OREF 101:31191a,31194a
TI Stepwise dissociation of yeast 60S ribosomal subunits by lithium chloride and identification of L25 as a primary 26S rRNA binding protein
AU El-Baradi, Tarek T. A. L.; Raue, Hendrik A.; De Regt, Victoria C. H. F.; Planta, Rudi J.
CS Biochem. Lab., Vrije Univ., Amsterdam, NL-1081-HV, Neth.
SO European Journal of Biochemistry (1984), 144(2), 393-400
CODEN: EJBCAI; ISSN: 0014-2956
DT Journal
LA English
OSC.G 20 THERE ARE 20 CAPLUS RECORDS THAT CITE THIS RECORD (21 CITINGS)

L6 ANSWER 57 OF 69 HCAPLUS COPYRIGHT 2010 ACS on STN
TI A method for isolation of intact, translationally active ribonucleic acid
AB A method for isolation of large, translationally active RNA species is described. The procedure involves homogenization of cells or tissues in 5M guanidine monothiocyanate followed by direct precipitation of RNA from the guanidinium by 4M LiCl. Modifications are described for use with tissue culture cells, yeast, tissues, or isolated nuclei. The advantages of the procedure include speed, simplicity, avoidance of ultracentrifugation, and its applicability to large nos. of small samples. The procedure yields large mRNA precursors up to 10,000 bases and mRNA species which translate very well. However, small (<300 nucleotides) RNA species are recovered with a poor yield.
AN 1984:82322 HCAPLUS <<LOGINID::20101122>>
DN 100:82322
OREF 100:12435a,12438a
TI A method for isolation of intact, translationally active ribonucleic acid
AU Cathala, Guy; Savouret, Jean Francois; Mendez, Bernardita; West, Brian L.; Karin, Michael; Martial, Joseph A.; Baxter, John D.
CS Dep. Med., Univ. California, San Francisco, CA, 94143, USA
SO DNA (1983), 2(4), 329-35
CODEN: DNAADR; ISSN: 0198-0238
DT Journal
LA English
OSC.G 220 THERE ARE 220 CAPLUS RECORDS THAT CITE THIS RECORD (220 CITINGS)

L6 ANSWER 58 OF 69 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Lactate dehydrogenase-C mRNA: its isolation and in vitro translation
AB Lactate dehydrogenase-C (LDH-C) mRNA was purified from DBA/2 mouse testes and translated in vitro. First, the LDH-C synthesizing polysomes were isolated by double immunopptn. using specific anti-LDH-C and anti-horse Ig antibodies. Extraction of mRNA was made from the isolated polysomes using a hot SDS-PhOH method at alkaline pH. In a wheat germ cell-free translation system, the mRNA coded for a polypeptide chain that could be immunopptd.

with specific anti-LDH-C antibody and comigrated with authentic LDH-C in SDS-polyacrylamide gel electrophoresis.
AN 1981:582525 HCAPLUS <<LOGINID::20101122>>
DN 95:182525
OREF 95:30391a,30394a
TI Lactate dehydrogenase-C mRNA: its isolation and in vitro translation
AU Ansari, Aftab A.; Baig, Masroor A.; Malling, Heinrich V.
CS Lab. Biochem. Genet., Natl. Inst. Environ. Health Sci., Research Triangle Park, NC, 27709, USA
SO Biochemical and Biophysical Research Communications (1981), 102(1), 93-9
CODEN: BBRCA9; ISSN: 0006-291X
DT Journal
LA English
OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L6 ANSWER 59 OF 69 HCAPLUS COPYRIGHT 2010 ACS on STN
TI A general procedure for preparing messenger RNA from eukaryotic cells without using phenol
AB A procedure which is totally devoid of phenol-based organic solvents and utilizes the deproteinizing ability of the chaotropic agents, LiCl and guanidinium chloride to isolate mRNA is described. Special considerations were given to preventing RNase action during the preparation For this purpose 3M LiCl-4M urea/1 mg/mL of heparin-15 mM EDTA was chosen as the principal deproteinizing agent. RNase activity was completely suppressed in this mixture The preparation method was applicable to both polysomal and total cytoplasmic RNA. Poly(A)-containing mRNA was isolated using an oligo(dT)-cellulose column. The isolated mRNA prepns. were analyzed for their intactness by sucrose gradient centrifugation and agarose gel electrophoresis in the presence of a denaturant, methylmercuric hydroxide. The messenger activities were tested in cell-free translation systems. The present procedure is superior in several respects to the conventional phenol-based solvent extraction methods in the consistent isolation of undegraded, functionally active RNA.
AN 1981:402999 HCAPLUS <<LOGINID::20101122>>
DN 95:2999
OREF 95:615a,618a
TI A general procedure for preparing messenger RNA from eukaryotic cells without using phenol
AU Ohi, Seigo; Short, John
CS Sch. Med., Univ. Pittsburgh, Pittsburgh, PA, 15261, USA
SO Journal of Applied Biochemistry (1980), 2(5), 398-413
CODEN: JABIDV; ISSN: 0161-7354
DT Journal
LA English

L6 ANSWER 60 OF 69 HCAPLUS COPYRIGHT 2010 ACS on STN
TI tRNA binding stabilizes rat liver 60S ribosomal subunits during treatment with lithium chloride
AB In the absence of mRNA, 1 mol. of nonacylated tRNA binds to the large ribosomal subunit of rat liver with a high affinity constant Free and tRNA-bound 60 S subunits were treated with increasing concns. of LiCl to obtain information on tRNA binding site. Transfer RNA had a strong protective effect on subunit modifications produced by LiCl: tRNA prevents subunit inactivation as measured by puromycin reaction and polyphenylalanine synthesis and it shifts the Li+/Mg2+ ratio value needed to reach 50% inactivation from 60 to 250; it also prevents ribosomal protein and 5 S RNA release and large sedimentation changes of subunits, induced by LiCl. To explain the mechanism of 60 S subunit stabilization by tRNA, 2 hypotheses are considered: stabilization can be

consequent on direct interaction of tRNA with specific proteins, or on maintenance on subunits of essential cations which are otherwise displaced by Li+, or both.
AN 1980:509385 HCAPLUS <<LOGINID::20101122>>
DN 93:109385
OREF 93:17453a,17456a
TI tRNA binding stabilizes rat liver 60S ribosomal subunits during treatment with lithium chloride
AU Reboud, Anne Marie; Dubost, Simone; Buisson, Monique; Reboud, Jean Paul
CS Lab. Biochim. Med., Univ. Lyon 1, Villeurbanne, 69622, Fr.
SO Journal of Biological Chemistry (1980), 255(14), 6954-61
CODEN: JBCHA3; ISSN: 0021-9258
DT Journal
LA English
OSC.G 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)

L6 ANSWER 61 OF 69 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Isolation of viral double-stranded RNAs using a lithium chloride fractionation procedure
AB A general procedure for the isolation of virus-specific double-stranded RNA (ds-RNA) is described. The procedure is based on the differential solubility of different types of nucleic acids in LiCl. Principal advantages over conventional methods are simplicity, avoidance of enzymic treatments, and relatively good yields of undegraded ds-RNA while permitting separation of several main groups of cellular and viral nucleic acids from the same batch of tissue. The method was successfully applied in tissues infected by several representative plant RNA viruses. The virus-specific ds-RNAs obtained have been identified by their resistance to RNase and comparison of their electrophoretic mobilities with those of the corresponding single-stranded RNA in polyacrylamide gels. The mol. wts. of the ds-RNAs of tobacco mosaic virus, turnip yellow mosaic virus, alfalfa mosaic virus, and peanut stunt virus fit the curved log mol. weight-migration relation constructed from a set of known marker ds-RNAs.
AN 1978:402775 HCAPLUS <<LOGINID::20101122>>
DN 89:2775
OREF 89:515a,518a
TI Isolation of viral double-stranded RNAs using a lithium chloride fractionation procedure
AU Diaz-Ruiz, J. R.; Kaper, J. M.
CS ARS, USDA, Beltsville, MD, USA
SO Preparative Biochemistry (1978), 8(1), 1-17
CODEN: PRBCBQ; ISSN: 0032-7484
DT Journal
LA English
OSC.G 37 THERE ARE 37 CAPLUS RECORDS THAT CITE THIS RECORD (37 CITINGS)

L6 ANSWER 62 OF 69 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Polyamines and protein synthesis. V. Effect of salt solutions on aminoacyl transfer RNA formation
AB The effect of salt solns. on the aminoacylation of tRNA in the presence of either Mg(OAc)2 or spermine was compared. Aminoacylation of tRNA with leucine, isoleucine, and valine stimulated by either Mg(OAc)2 or spermine was sensitive to NaCl, a slight difference in sensitivity being observed. KCl, NH4Cl, LiCl, and NaCl inhibited isoleucyl-tRNA formation stimulated by either Mg(OAc)2 or spermine. Phenylalanyl-tRNA formation was not inhibited by NaCl, KCl, and NH4Cl in the presence of Mg(OAc)2 but was inhibited by these salts in the presence of spermine. NaCl and LiCl inhibited the binding of spermine to tRNA. The inhibitory effect of salt solns. on aminoacyl-tRNA formation might be due to the inhibition of the binding of spermine to tRNA.

AN 1970:421318 HCAPLUS <<LOGINID::20101122>>
DN 73:21318
OREF 73:3531a,3534a
TI Polyamines and protein synthesis. V. Effect of salt solutions on aminoacyl transfer RNA formation
AU Takeda, Yoshifumi; Igarashi, Kazuei
CS Res. Inst. Microbial Dis., Osaka Univ., Suita, Japan
SO Biochimica et Biophysica Acta, Nucleic Acids and Protein Synthesis (1970), 204(2), 406-11
CODEN: BBNPAS; ISSN: 0005-2787
DT Journal
LA English

L6 ANSWER 63 OF 69 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Binding of transfer ribonucleic acid to ribosomes. Comparison of the nonenzymatic binding of aminoacylated and deacylated transfer ribonucleic acid
AB Binding of deacylated transfer RNA to Escherichia coli ribosomesat 5mM Mg has been studied and compared with the nonenzymic binding of phenylalanyl-tRNA in the same system. Deacylated tRNA was labeled in the 3'-termi-nal dinucleotide. Different ribosomal prepns. containing 70S ribosomes but no subunits were investigated and optimal conditions were established. Binding of deacylated tRNA to ribosomes increased with increasing Mg concns. and differed from binding of aminoacylated tRNA which showed a pronounced maximum between 4 and 8mM Mg. Binding of deacylated tRNA was more labile than binding of aminoacylated tRNA. The former was rather insensitive to changes of temperature and incubation time, whereas binding of aminoacylated tRNA was critically dependent on both conditions and decreased at temps. higher than 24° and upon longer incubation. KCl stimulated the nonenzymic binding of aminoacylated tRNA. However, at higher temps. and upon longer incubation, KCl caused adisplacement of aminoacyl-tRNA from ribosomes. Binding of deacylated tRNA was always inhibited by KCl at concns. higher than 20mM and by Mg at 5mM. Both NaCl and LiCl showed an effect similar to that of KCl on the binding of phenylalanyl-tRNA: a stimulation of binding at low concns. and an inhibition of binding at higher concns. Both monovalent ions inhibited binding of deacylated tRNA to ribosomes. This suggests that the order in which monovalent ions act on the binding of both tRNAs is similar, but that they differ with respect to the concentration This order is the same as the order of their hydrated atomic radius.
AN 1970:86283 HCAPLUS <<LOGINID::20101122>>
DN 72:86283
OREF 72:15675a,15678a
TI Binding of transfer ribonucleic acid to ribosomes. Comparison of the nonenzymatic binding of aminoacylated and deacylated transfer ribonucleic acid
AU Philipps, Georg R.
CS Sch. of Med., St. Louis Univ., St. Louis, MO, USA
SO Journal of Biological Chemistry (1970), 245(4), 859-68
CODEN: JBCHA3; ISSN: 0021-9258
DT Journal
LA English

L6 ANSWER 64 OF 69 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Escherichia coli ribosomes. III. Reversible dissociation of 5S RNA by lithium chloride
AB Treatment of Escherichia coli ribosomes with 2M LiCl liberates an RNA designated 5S, and also results in solubilization of about

half the protein (CA 67:60945e). Since 5S appears to be a permanent, universal ribosome constituent, of unknown biochem. role, a study was made of the reversibility of the attachment of 5S to the ribosome. The subunits 70S and 50S from E. coli have no affinity for 5S under conditions that bind transfer RNA (t-RNA) to an exchange site. Dialysis against a reconstitution medium results in 5S being bound to only 1 site of the reconstituted particle, which corresponds to the initial 50S subunit. Unchanged t-RNA has no affinity for this site. Part of the protein solubilized by LiCl is required for reconstitution of the 5S RNA binding site.

AN 1969:111593 HCAPLUS <<LOGINID::20101122>>
DN 70:111593
OREF 70:20833a,20836a
TI Escherichia coli ribosomes. III. Reversible dissociation of 5S RNA by lithium chloride
AU Reynier, Max; Monier, Roger
CS Centre Biochim. Biol. Mol., C.N.R.S., Marseilles, Fr.
SO Bulletin de la Societe de Chimie Biologique (1968), 50(10), 1583-600
CODEN: BSCIA3; ISSN: 0037-9042
DT Journal
LA French

L6 ANSWER 65 OF 69 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Purification of potato virus X and preparation of infectious ribonucleic acid by degradation with lithium chloride
AB Large quantities of relatively unaggregated potato virus X (PVX) were prepared by the following sequential steps: homogenization of systemically infected leaves of Nicotiana glutinosa in 1.5 vols. of 0.2M Na_2HPO_4, adsorption of the extract with charcoal and DEAE-cellulose, filtration through celite, centrifugation 44,000 g for 90 min., resuspension of the pellet in H_2O, emulsification for 5 min. with an equal volume of $CHCl_3$, centrifugation at 12,000 g for 10 min., and removal of the aqueous layer containing the virus with a hypodermic syringe. The virus was sedimented at 160,000 g for 30 min., resuspended in H_2O, and the $CHCl_3$ extraction and sedimentation steps were repeated. The final virus preparation in H_2O, which could be stored at 4° until required, was free of host materials and was highly infectious, producing 50-100 lesions on leaves of Gomphrena globosa when diluted to a concentration of 10 μg./ml. PVX RNA was isolated from the virus by the degradation procedure using LiCl (Francki, et al., 1966), but freezing for ≤3 hrs. at -10 to -15° was necessary for the complete separation of virus protein and RNA. The PVX RNA prepared by the LiCl method was <1% as infectious as undegraded virus containing an equal amount of RNA. During the preparation of PVX RNA by this method, viral protein that retained some of its immunological properties could be recovered.

AN 1969:111571 HCAPLUS <<LOGINID::20101122>>
DN 70:111571
OREF 70:20829a
TI Purification of potato virus X and preparation of infectious ribonucleic acid by degradation with lithium chloride
AU Francki, R. I. B.; McLean, G. D.
CS Univ. Adelaide, Glen Osmond, Australia
SO Australian Journal of Biological Sciences (1968), 21(6), 1311-18
CODEN: AJBSAM; ISSN: 0004-9417
DT Journal
LA English
OSC.G 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)

L6 ANSWER 66 OF 69 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Reversible effect of lithium chloride on ribosomes

AB The binding of aminoacyl transfer RNA to ribosomes either in the presence (specific binding) or in the absence (nonspecific binding) of messenger RNA was inhibited by LiCl. This effect was partially reversible by NH4+ or K+. The ribosomes were completely dissociated into 50 S and 30 S subunits in the presence of 0.2M LiCl. When LiCl was removed, the subunits associated again. The activity of ribosomes to synthesize polyphenylalanine in the presence of poly(uridylic acid) was recovered upon removal of LiCl. This reversible effect of LiCl was antagonized by the presence of a low concentration of NH4+.
AN 1968:408422 HCAPLUS <<LOGINID::20101122>>
DN 69:8422
OREF 69:1571a,1574a
TI Reversible effect of lithium chloride on ribosomes
AU Suzuka, Iwao; Kaji, Akira
CS Sch. of Med., Univ. of Pennsylvania, Philadelphia, PA, USA
SO Journal of Biological Chemistry (1968), 243(11), 3136-41
CODEN: JBCHA3; ISSN: 0021-9258
DT Journal
LA English

L6 ANSWER 67 OF 69 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Protein-nucleic acid interactions. III. Cation effect on binding strength and specificity
AB cf. preceding abstract Cations affected the extent and specificity of binding of individual members of the series (L-lysine)n-ε-N-(dinitrophenyl-L-lysine (n = 3, 4, 5, 6, or 7) to synthetic polynucleotides, poly (A + U) or poly (I + C). Interpreting this effect as the result of competition between the cation and the oligolysine for the polynucleotide phosphates, it was possible to group cations into those with a binding preference for poly (A + U) [Me4N+ > Li+ > Na+; Mg2+, Ca2+, Mn2+]; those with little specificity for either polynucleotide [Lys H+, K+, TrisH+, NH4+]; and those with a binding preference for poly (I + C) [ArgH+, HisH+]. Cation specificity for poly (A + U) correlated with cation ability to organize water structure and with volume increase on cation neutralization of polyphosphates, suggesting that specificity in protein-nucleic acid interactions might be directed by the solvent structure surrounding the interacting species. This grouping according to solvent structure promotion also held regarding cation effect on messenger stimulated binding of transfer RNA to ribosomes, K+, TrisH+, and NH4+ promoting this binding and Me4N+, Li+, and Na+, inhibiting it, suggesting a connection between some specific cation effects in biol. systems and cation binding to phosphate.
AN 1967:505249 HCAPLUS <<LOGINID::20101122>>
DN 67:105249
OREF 67:19807a,19810a
TI Protein-nucleic acid interactions. III. Cation effect on binding strength and specificity
AU Latt, Samuel A.; Sober, Herbert A.
CS Natl. Cancer Inst., Natl. Insts. of Health, Bethesda, MD, USA
SO Biochemistry (1967), 6(10), 3307-14
CODEN: BICHAW; ISSN: 0006-2960
DT Journal
LA English
OSC.G 6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD (7 CITINGS)

L6 ANSWER 68 OF 69 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Binding of alkali metal ions to polynucleotides
AB In order to estimate the relative binding of the alkali metals with

polynucleotides, the critical salt concentration of cetyltrimethylammonium precipitation of the polynucleotides was used as a criterion of counterion binding . Measurements of critical salt concentration at 28° were made by adding water to a solution of the polynucleotide (0.5 mg./ml.) in alkali metal chloride (0.938M) and cetyltrimethylammonium bromide (2%) until the appearance of a precipitate The relative order of critical salt concns. for the 4 tested polynucleotides were CsCl > RbCl > KCl > NaCl > LiCl, the strength of specific binding therefore being Li+ > Na+ > K+ > Rb+ > Cs+. The relation between critical salt concentration and crystal radius of the counterion was linear. Tris ion binding was dependent on the nature of the polynucleotide. The polynucleotides showed specificity in the order DNA > soluble RNA .simeq. ribosomal RNA > polyuridylic acid, the order being that of decreasing helical structure and decreasing charge density of the macroion.

AN 1966:466675 HCAPLUS <<LOGINID::20101122>>
DN 65:66675
OREF 65:12453c-e
TI Binding of alkali metal ions to polynucleotides
AU Barber, Roger; Noble, Marion
CS Worcester Found. for Exptl. Biol., Shrewsbury, MA
SO Biochimica et Biophysica Acta, Nucleic Acids and Protein Synthesis (1966), 123(1), 205-7
CODEN: BBNPAS; ISSN: 0005-2787
DT Journal
LA English

L6 ANSWER 69 OF 69 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Specific interaction of s-RNA [soluble ribonucleic acid] with polysomes; inhibition by lithium chloride
AB The inhibitory effect of LiCl on the attachment of s-RNA to ribosomes was studied. Preincubated extract prepared as described by Nirenberg and Matthaei (CA 56, 7695i) was dialyzed against a buffer solution of 10-2M Mg acetate, 10-2M Tris pH 7.5, 6 + 10-3M KCl, and 6 + 10-3M β-mercaptoethanol and then centrifuged at 105,000 g for 90 min. to obtain a ribosome-rich extract Assay of individual amino acid s-RNA was performed on each fraction obtained after sucrose density-gradient centrifugation. The amount of individual aminoacyl s-RNA was measured by subtracting the radioactivity obtained frvm 14C-labeled amino acid insol. in hot trichloroacetic acid from that insol. in the cold acid. Addition of LiCl to the reaction mixture of ribosome-rich extract, s-RNA , guanosine triphosphate, polyuridylic acid (I), adenosine triphosphate, and its generating system inhibited the specific attachment of phenylalanine s-RNA to the I-induced polysomes. The inhibition was antagonized by K+; 0.67M NH4Cl did not cause inhibition; and LiCl did not inhibit aminoacyl s-RNA synthetase. Concns. of LiCl which inhibited the attachment of s-RNA did not prevent the attachment of I to ribosomes. Another experiment showed that 0.67M LiCl disintegrated 70S ribosomes into 50S and 30S particles. These observations suggest that LiCl inhibits attachment of s-RNA to ribosomes by splitting the 70S particle into subunits.

AN 1964:455774 HCAPLUS <<LOGINID::20101122>>
DN 61:55774
OREF 61:9708c-f
TI Specific interaction of s-RNA [soluble ribonucleic acid] with polysomes; inhibition by lithium chloride
AU Kaji, Akira; Kaji, Hideko
CS Univ. of Pennsylvania, Philadelphia
SO Biochimica et Biophysica Acta, Specialized Section on Nucleic Acids and Related Subjects (1964), 87(3), 519-22

```
     CODEN: BBASB7; ISSN: 0926-6550
DT   Journal
LA   English


=> d his


     (FILE 'HOME' ENTERED AT 12:58:44 ON 22 NOV 2010)

     FILE 'REGISTRY' ENTERED AT 12:59:04 ON 22 NOV 2010
                EXP LICL/CN
                EXP LITHIUM CHLORIDE/CN
L1             1 S E3

     FILE 'HCAPLUS' ENTERED AT 12:59:36 ON 22 NOV 2010
L2         29088 S L1
L3        497209 S RNA OR RIBONUCLEOTIDE OR RIBONUCLEIC OR OLIGORIBONUCLEOTIDE O
L4       2121088 S ISOLATION OR PURIFICATION OR SEPARATION OR LYSIS OR BINDING
L5           160 S L2 AND L3 AND L4
L6            69 S L5 AND (PY<2002 OR AY<2002 OR PRY<2002)

=> log hold

COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                       ENTRY    SESSION
FULL ESTIMATED COST                                   225.54     231.75

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)          SINCE FILE      TOTAL
                                                       ENTRY    SESSION
CA SUBSCRIBER PRICE                                    -58.65     -58.65

 SESSION WILL BE HELD FOR 120 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 13:01:49 ON 22 NOV 2010

Connecting via Winsock to STN



Welcome to STN International!  Enter x:X

LOGINID:SSPTAEXO1623

PASSWORD:
 * * * * * * RECONNECTED TO STN INTERNATIONAL * * * * * *
SESSION RESUMED IN FILE 'HCAPLUS' AT 13:42:12 ON 22 NOV 2010
FILE 'HCAPLUS' ENTERED AT 13:42:12 ON 22 NOV 2010
COPYRIGHT (C) 2010 AMERICAN CHEMICAL SOCIETY (ACS)s

COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                       ENTRY    SESSION
FULL ESTIMATED COST                                   225.54     231.75

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)          SINCE FILE      TOTAL
                                                       ENTRY    SESSION
CA SUBSCRIBER PRICE                                    -58.65     -58.65

=> s lysis or lysed
         37871 LYSIS
         10295 LYSED
```

```
L7       45434 LYSIS OR LYSED

=> s binding or (solid support)
       1180525 BINDING
       1300704 SOLID
        630493 SUPPORT
         10567 SOLID SUPPORT
                 (SOLID(W)SUPPORT)
L8     1189527 BINDING OR (SOLID SUPPORT)

=> s l7 and l8
L9        5453 L7 AND L8

=> s l6 and l9
L10          5 L6 AND L9

=> d l10 1-5 ti abs bib

L10  ANSWER 1 OF 5  HCAPLUS  COPYRIGHT 2010 ACS on STN
TI   Methods and compositions and apparatus for isolation of
     biological macromolecules
AB   The present invention relates generally to compns., methods, and kits for
     use in clarification and viscosity reduction of biol. samples.  More
     specifically, the invention relates to such compns., methods, and kits
     that are useful in the isolation of biol. macromols. from cells
     (e.g., bacterial cells, animals cells, fungal cells, viruses, yeast cells,
     or plant cells) via lysis and one or more addnl.
     isolation procedures, such as filtration procedures.  In
     particular, the invention relates to compns., methods, and kits wherein
     biol. macromols. are isolated using a filter, where the pore size
     increases in the direction of sample flow.  The compns., methods and kits
     of the invention are suitable for isolating a variety of forms of biol.
     macromols. from cells.  The compns., methods and kits of the invention are
     particularly well-suited for rapid isolation of nucleic acid
     mols. from bacterial cells.  HeLa cells were disrupted in guanidinium
     isothiocyanate lysis buffer and transferred to a filter
     (comprising a first regenerated cellulose layer with a pore size of 0.2
     μm and a second high-d. polyethylene layer 1/8 in. thick (comprising
     two 1/16 in. thick frits) with a 20 μm pore size) contained in a
     conical housing.  This housing was then placed in a 2-mL conical
     centrifuge tube, and centrifuged for 2 min.  An equal volume of 70% EtOH was
     added to the flow-through and RNA was purified using an
     RNA-binding cartridge.
AN   2002:637932  HCAPLUS <<LOGINID::20101122>>
DN   137:181887
TI   Methods and compositions and apparatus for isolation of
     biological macromolecules
IN   Simms, Domenica; Trinh, Thuan
PA   Invitrogen Corporation, USA
SO   PCT Int. Appl., 42 pp.
     CODEN: PIXXD2
DT   Patent
LA   English
FAN.CNT 1
     PATENT NO.          KIND   DATE        APPLICATION NO.         DATE
     ---------------     ----   --------    --------------------    --------
PI   WO 2002065125        A1    20020822    WO 2002-US4185          20020213 <--
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
```

```
            PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
            UA, UG, UZ, VN, YU, ZA, ZM, ZW
        RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,
            CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,
            BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
    AU 2002306474        A1    20020828    AU 2002-306474         20020213 <--
    US 20020127587       A1    20020912    US 2002-73260          20020213 <--
PRAI US 2001-268027P     P     20010213  <--
    WO 2002-US4185       W     20020213
OSC.G   4     THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)
RE.CNT  5     THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
              ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10  ANSWER 2 OF 5  HCAPLUS  COPYRIGHT 2010 ACS on STN
TI   Methods and kits for the purification of nucleic acids from
     bacterial cells using a single reagent containing polyethylene glycol and
     binding to paramagnetic beads
AB   The invention includes reagents and methods for the isolation of
     nucleic acids.  The reagents described herein contain a nucleic acid
precipitating
     agent and a solid phase carrier.  The reagents can optionally be
     formulated to cause the lysis of a cell.  These reagents can be
     used to isolate a target nucleic acid mol. from a cell or a solution
containing a
     mixture of different size nucleic acid mols.  In a preferred embodiment
     plasmid DNA from bacterial cells are purified by precipitation with 1-4%
     polyethylene glycol (mol. weight of 8000) and 0.5M salt concentration  The DNA
is
     further purified by reversible binding to paramagnetic beads
     that are coated with amine or encapsulated carboxyl groups.  The first
     reagent allows purification of DNA greater than 10 kb, while a second round of
     purification allows purification of DNA greater than 2.4 kb from a mixture of
nucleic
     acids 7% polyethylene glycol.  Magnetic fields of about 1000 G are applied
     to the wells of a microtiter plate using a magnetic plate holder containing an
     N35 magnet for removal of paramagnetic beads following DNA purification  The
     disclosed reagents and methods provides a simple, robust and readily
     automatable means of nucleic acid isolation and purification which
     produces high quality nucleic acid mols. suitable for: capillary
     electrophoresis, nucleotide sequencing, reverse transcription cloning the
     transfection, transduction or microinjection of mammalian cells, gene
     therapy protocols, the in vitro synthesis of RNA probes, cDNA
     library construction and PCR amplification.
AN   2002:539860  HCAPLUS <<LOGINID::20101122>>
DN   137:89428
TI   Methods and kits for the purification of nucleic acids from
     bacterial cells using a single reagent containing polyethylene glycol and
     binding to paramagnetic beads
IN   McKernan, Kevin J.
PA   Whitehead Institute for Biomedical Research, USA
SO   PCT Int. Appl., 45 pp.
     CODEN: PIXXD2
DT   Patent
LA   English
FAN.CNT 1
     PATENT NO.           KIND   DATE        APPLICATION NO.        DATE
     ---------------      ----   --------    --------------------   --------
PI   WO 2002055727        A2     20020718    WO 2002-US353          20020109 <--
     WO 2002055727        A3     20021003
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
```

GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT,
RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US,
UZ, VN, YU, ZA, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,
CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,
BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

CA	2433746	A1	20020718	CA 2002-2433746	20020109 <--
AU	2002239826	A1	20020724	AU 2002-239826	20020109 <--
US	20020106686	A1	20020808	US 2002-42923	20020109 <--
EP	1349951	A2	20031008	EP 2002-705692	20020109 <--

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

US	20060024701	A1	20060202	US 2005-126775	20050511 <--
PRAI US	2001-260774P	P	20010109	<--	
US	2002-42923	B1	20020109		
WO	2002-US353	W	20020109		

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OSC.G 6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD (6 CITINGS)
RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 3 OF 5 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Methods and kits for isolating nucleic acids from leukocytes by binding to antibodies on a solid support
AB The present invention relates to a method of isolating nucleic acid from a blood sample. The method involves selectively isolating leukocytes from said sample by binding said leukocytes to a solid support containing a binding partner specific for the leukocyte, for example an antibody. The antibody can bind an antigen selected from one of more of the following: HLA-I, CD11a, CD18, CD45, CD46, CD50, CD82, CD162, CD5 and CD15 and a specific example shows a combination of CD45 and CD15. The said leukocytes are lysed in detergents to release nucleic acids which are subsequently bound to a second solid support which is neg. charged. Kits for isolating nucleic acid from samples form further embodiments of the invention.
AN 2001:904506 HCAPLUS <<LOGINID::20101122>>
DN 136:15912
TI Methods and kits for isolating nucleic acids from leukocytes by binding to antibodies on a solid support
IN Bergholtz, Stine; Korsnes, Lars; Andreassen, Jack
PA Dynal Biotech Asa, Norway; Jones, Elizabeth Louise
SO PCT Int. Appl., 51 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.		KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001094572	A1	20011213	WO 2001-GB2472	20010605 <--

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT,
RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US,
UZ, VN, YU, ZA, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

CA	2410888	A1	20011213	CA 2001-2410888	20010605 <--

```
     CA 2410888           C     20080916
     EP 1290155           A1    20030312    EP 2001-934205         20010605 <--
     EP 1290155           B1    20060809
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
     AU 2001260507        B2    20060831    AU 2001-260507         20010605 <--
     AT 335815            T     20060915    AT 2001-934205         20010605 <--
     ES 2269399           T3    20070401    ES 2001-934205         20010605 <--
     US 20030180754       A1    20030925    US 2003-297301         20030430 <--
     US 20080293035       A1    20081127    US 2008-98411          20080404 <--
PRAI GB 2000-13658        A     20000605  <--
     WO 2001-GB2472       W     20010605  <--
     US 2003-297301       B1    20030430
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OSC.G   2     THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)
RE.CNT  4     THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
              ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10  ANSWER 4 OF 5  HCAPLUS  COPYRIGHT 2010 ACS on STN
TI   Methods and compositions for isolating nucleic acids
AB   Compns. and methods are disclosed for isolating nucleic acids from biol.
     tissues and cells (including tumor cells) and for tissue/cell
     solubilization for other mol. biol. uses, wherein the compns. comprise, in
     part, novel combinations of chaotropic agents and aromatic alcs. which act
     synergistically to effect better tissue/protein solubilization.  The
     inventive compns. further include aprotic solvents for deactivation of
     RNases and denaturization of proteins, as well as detergents for enhancing
     cell lysis and nucleoprotein dissociation  The inventive methods
     also comprise the use of a centrifuge, a solid-support
     matrix, and a microporous membrane for final isolation of the
     precipitated nucleic acids, resulting in high yield and purity of the
precipitated
     nucleic acid.
AN   1997:400479  HCAPLUS <<LOGINID::20101122>>
DN   127:78238
OREF 127:14901a,14904a
TI   Methods and compositions for isolating nucleic acids
IN   Wiggins, James C.
PA   USA
SO   U.S., 15 pp.
     CODEN: USXXAM
DT   Patent
LA   English
FAN.CNT 1
     PATENT NO.           KIND   DATE        APPLICATION NO.        DATE
     ---------------      ----   --------    --------------------   --------
PI   US 5637687            A     19970610    US 1993-115184         19930831 <--
PRAI US 1993-115184              19930831  <--
OSC.G   13    THERE ARE 13 CAPLUS RECORDS THAT CITE THIS RECORD (13 CITINGS)
RE.CNT  8     THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD
              ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10  ANSWER 5 OF 5  HCAPLUS  COPYRIGHT 2010 ACS on STN
TI   Method for the simultaneous isolation of genomic DNA and highly
     purified total RNA
AB   The invention concerns the rapid simultaneous isolation of
     genomic DNA and cellular total RNA, free from genomic DNA, from
     different starting materials (e.g., <105 cells or <1 mg tissue sample).
     Applications of the method are in mol. biol., biochem., genetic
     techniques, medicine, veterinary medicine, and related areas.  In the
     method, the DNA- and RNA-containing materials are lysed
```

with a special buffer, the lysate for isolation of the genomic DNA is incubated with a nonporous highly-dispersed SiO2 support, the support with the bound DNA is separated by centrifugation and washed with buffer solution, and then the DNA is released from the support with a low-salt-concentration buffer. The lysate, after separation of the support-fixed DNA, is mixed with specified amts. of PhOH, CHCl3, and NaOAc, and after phase separation, the cellular total RNA is precipitated out of the aqueous phase by addition of iso-PrOH. Lysis is done with buffers containing chaotropic salts of higher ionic strength. Lysis of the material and binding of genomic DNA to the support are done with the same buffer. An example is given of the isolation of DNA and total RNA from a eukaryotic monolayer cell culture with about 5 + 106 cells.

AN 1996:563526 HCAPLUS <<LOGINID::20101122>>
DN 125:190022
OREF 125:35466h,35467a
TI Method for the simultaneous isolation of genomic DNA and highly purified total RNA
IN Hillebrand, Timo; Bendzko, Peter; Peters, Lars-Erik
PA Invitek Gmbh, Germany
SO Ger. Offen., 4 pp.
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 19506887	A1	19960822	DE 1995-19506887	19950217 <--
DE 19506887	C2	19991014		

PRAI DE 1995-19506887 19950217 <--
OSC.G 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)
RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
=> s l3 and l9
L11        359 L3 AND L9

=> s (alkali metal) or lithium or potassium or cesium
         458522 ALKALI
        2071403 METAL
         178760 ALKALI METAL
                  (ALKALI(W)METAL)
         392330 LITHIUM
         791160 POTASSIUM
         113833 CESIUM
L12     1302623 (ALKALI METAL) OR LITHIUM OR POTASSIUM OR CESIUM

=> s l11 and l12
L13          40 L11 AND L12

=> s l13 and (PY<2002 or AY<2002 or PRY<2002)
       22007366 PY<2002
        4248856 AY<2002
        3717451 PRY<2002
L14          17 L13 AND (PY<2002 OR AY<2002 OR PRY<2002)

=> d l14 1-17 ti abs bib

L14  ANSWER 1 OF 17  HCAPLUS  COPYRIGHT 2010 ACS on STN
```

TI Eluting reagents, methods and kits for isolating DNA
AB Eluting reagents and methods for isolating DNA from biol. materials are provided. A kit for isolating DNA comprises: (a) optionally instruction means for isolating substantially pure DNA from a biol. sample; (b) a DNA purifying composition; (c) a DNA eluting reagent; and (d) a solid support selected from a group consisting of glass fiber, nylon, polyester, polyethersulfone, polyolefin, polyvinylidene fluoride, and combinations thereof, wherein the DNA eluting reagent comprises: (i) a buffer; (ii) a base; (iii) a chelating agent; and (iv) water; wherein the chelating agent is present in an amount no greater than 0.1 mM based on the total volume of the DNA eluting reagent, the base is present in an amount between 5-8 mM, and the combined amount of buffer, base, and chelating agent is present in an amount no greater than 20 mM based on the total volume of the DNA eluting reagent.
AN 2010:1127408 HCAPLUS <<LOGINID::20101122>>
DN 153:377910
TI Eluting reagents, methods and kits for isolating DNA
IN Heath, Ellen M.; Shuman, Ruth M.
PA Qiagen North American Holdings, Inc., USA
SO U.S., 23pp.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 7790865	B1	20100907	US 1999-241637	19990202 <--
PRAI US 1999-241637		19990202 <--		

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
RE.CNT 61 THERE ARE 61 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 2 OF 17 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Endocrine disruptor screening using DNA chips of endocrine disruptor-responsive genes
AB A method and kit for detecting endocrine-disrupting chems. using DNA microarrays are claimed. The method comprises preparing a nucleic acid sample containing mRNAs or cDNAs originating in cells, tissues, or organisms which have been brought into contact with a sample containing the endocrine disruptor. The nucleic acid sample is hybridized with DNA microarrays having genes affected by the endocrine disruptor or DNA fragments originating in these genes have been fixed. The results obtained are then compared with the results obtained with the control sample to select the gene affected by the endocrine disruptor. Genes whose expression is altered by tri-Bu tin, 4-octaphenol, 4-nonylphenol, di-N-Bu phthalate, dichlorohexyl phthalate, octachlorostyrene, benzophenone, diethylhexyl phthalate, diethylstilbestrol (DES), and 17-β estradiol (E2), were found in mice by DNA chip anal.
AN 2002:937303 HCAPLUS <<LOGINID::20101122>>
DN 138:20443
TI Endocrine disruptor screening using DNA chips of endocrine disruptor-responsive genes
IN Kondo, Akihiro; Takeda, Takeshi; Mizutani, Shigetoshi; Tsujimoto, Yoshimasa; Takashima, Ryokichi; Enoki, Yuki; Kato, Ikunoshin
PA Takara Bio Inc., Japan
SO Jpn. Kokai Tokkyo Koho, 386 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

PI	JP 2002355079	A	20021210	JP 2002-69354	20020313 <--
PRAI	JP 2001-73183	A	20010314 <--		
	JP 2001-74993	A	20010315 <--		
	JP 2001-102519	A	20010330 <--		

OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L14 ANSWER 3 OF 17 HCAPLUS COPYRIGHT 2010 ACS on STN

TI Methods and compositions and apparatus for isolation of biological macromolecules

AB The present invention relates generally to compns., methods, and kits for use in clarification and viscosity reduction of biol. samples. More specifically, the invention relates to such compns., methods, and kits that are useful in the isolation of biol. macromols. from cells (e.g., bacterial cells, animals cells, fungal cells, viruses, yeast cells, or plant cells) via lysis and one or more addnl. isolation procedures, such as filtration procedures. In particular, the invention relates to compns., methods, and kits wherein biol. macromols. are isolated using a filter, where the pore size increases in the direction of sample flow. The compns., methods and kits of the invention are suitable for isolating a variety of forms of biol. macromols. from cells. The compns., methods and kits of the invention are particularly well-suited for rapid isolation of nucleic acid mols. from bacterial cells. HeLa cells were disrupted in guanidinium isothiocyanate lysis buffer and transferred to a filter (comprising a first regenerated cellulose layer with a pore size of 0.2 μm and a second high-d. polyethylene layer 1/8 in. thick (comprising two 1/16 in. thick frits) with a 20 μm pore size) contained in a conical housing. This housing was then placed in a 2-mL conical centrifuge tube, and centrifuged for 2 min. An equal volume of 70% EtOH was added to the flow-through and RNA was purified using an RNA-binding cartridge.

AN 2002:637932 HCAPLUS <<LOGINID::20101122>>
DN 137:181887

TI Methods and compositions and apparatus for isolation of biological macromolecules

IN Simms, Domenica; Trinh, Thuan
PA Invitrogen Corporation, USA

SO PCT Int. Appl., 42 pp.
CODEN: PIXXD2
DT Patent
LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002065125	A1	20020822	WO 2002-US4185	20020213 <--
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	AU 2002306474	A1	20020828	AU 2002-306474	20020213 <--
	US 20020127587	A1	20020912	US 2002-73260	20020213 <--
PRAI	US 2001-268027P	P	20010213 <--		
	WO 2002-US4185	W	20020213		

OSC.G 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)
RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 4 OF 17 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Methods and kits for the purification of nucleic acids from bacterial cells using a single reagent containing polyethylene glycol and binding to paramagnetic beads
AB The invention includes reagents and methods for the isolation of nucleic acids. The reagents described herein contain a nucleic acid precipitating agent and a solid phase carrier. The reagents can optionally be formulated to cause the lysis of a cell. These reagents can be used to isolate a target nucleic acid mol. from a cell or a solution containing a mixture of different size nucleic acid mols. In a preferred embodiment plasmid DNA from bacterial cells are purified by precipitation with 1-4% polyethylene glycol (mol. weight of 8000) and 0.5M salt concentration The DNA is further purified by reversible binding to paramagnetic beads that are coated with amine or encapsulated carboxyl groups. The first reagent allows purification of DNA greater than 10 kb, while a second round of purification allows purification of DNA greater than 2.4 kb from a mixture of nucleic acids 7% polyethylene glycol. Magnetic fields of about 1000 G are applied to the wells of a microtiter plate using a magnetic plate holder containing an N35 magnet for removal of paramagnetic beads following DNA purification The disclosed reagents and methods provides a simple, robust and readily automatable means of nucleic acid isolation and purification which produces high quality nucleic acid mols. suitable for: capillary electrophoresis, nucleotide sequencing, reverse transcription cloning the transfection, transduction or microinjection of mammalian cells, gene therapy protocols, the in vitro synthesis of RNA probes, cDNA library construction and PCR amplification.
AN 2002:539860 HCAPLUS <<LOGINID::20101122>>
DN 137:89428
TI Methods and kits for the purification of nucleic acids from bacterial cells using a single reagent containing polyethylene glycol and binding to paramagnetic beads
IN McKernan, Kevin J.
PA Whitehead Institute for Biomedical Research, USA
SO PCT Int. Appl., 45 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2002055727	A2	20020718	WO 2002-US353	20020109 <--
WO 2002055727	A3	20021003		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2433746	A1	20020718	CA 2002-2433746	20020109 <--
AU 2002239826	A1	20020724	AU 2002-239826	20020109 <--
US 20020106686	A1	20020808	US 2002-42923	20020109 <--
EP 1349951	A2	20031008	EP 2002-705692	20020109 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,				

```
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
     US 20060024701       A1    20060202    US 2005-126775         20050511 <--
PRAI US 2001-260774P      P     20010109  <--
     US 2002-42923        B1    20020109
     WO 2002-US353        W     20020109
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OSC.G   6     THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD (6 CITINGS)
RE.CNT  4     THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
              ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14  ANSWER 5 OF 17  HCAPLUS  COPYRIGHT 2010 ACS on STN
TI   Methods and kits for isolating nucleic acids from leukocytes by
     binding to antibodies on a solid support
AB   The present invention relates to a method of isolating nucleic acid from a
     blood sample.  The method involves selectively isolating leukocytes from
     said sample by binding said leukocytes to a solid
     support containing a binding partner specific for the
     leukocyte, for example an antibody.  The antibody can bind an antigen
     selected from one of more of the following: HLA-I, CD11a, CD18, CD45,
     CD46, CD50, CD82, CD162, CD5 and CD15 and a specific example shows a
     combination of CD45 and CD15.  The said leukocytes are lysed in
     detergents to release nucleic acids which are subsequently bound to a
     second solid support which is neg. charged.  Kits for
     isolating nucleic acid from samples form further embodiments of the
     invention.
AN   2001:904506  HCAPLUS <<LOGINID::20101122>>
DN   136:15912
TI   Methods and kits for isolating nucleic acids from leukocytes by
     binding to antibodies on a solid support
IN   Bergholtz, Stine; Korsnes, Lars; Andreassen, Jack
PA   Dynal Biotech Asa, Norway; Jones, Elizabeth Louise
SO   PCT Int. Appl., 51 pp.
     CODEN: PIXXD2
DT   Patent
LA   English
FAN.CNT 1
     PATENT NO.           KIND   DATE        APPLICATION NO.        DATE
     ---------------      ----   --------    --------------------   --------
PI   WO 2001094572         A1    20011213    WO 2001-GB2472         20010605 <--
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT,
             RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US,
             UZ, VN, YU, ZA, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
             BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     CA 2410888           A1    20011213    CA 2001-2410888        20010605 <--
     CA 2410888           C     20080916
     EP 1290155           A1    20030312    EP 2001-934205         20010605 <--
     EP 1290155           B1    20060809
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
     AU 2001260507        B2    20060831    AU 2001-260507         20010605 <--
     AT 335815            T     20060915    AT 2001-934205         20010605 <--
     ES 2269399           T3    20070401    ES 2001-934205         20010605 <--
     US 20030180754       A1    20030925    US 2003-297301         20030430 <--
     US 20080293035       A1    20081127    US 2008-98411          20080404 <--
PRAI GB 2000-13658        A     20000605  <--
     WO 2001-GB2472       W     20010605  <--
```

US 2003-297301 B1 20030430
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OSC.G 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)
RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 6 OF 17 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Method using filtration aids for the separation of virus vectors from nucleic acids and other cellular contaminants
AB Methods are disclosed for the purification of encapsulated viruses. The methods are advantageous in that they employ filtration aids, together with low concns. of metal ions, in place of nucleases for purification This provides important advantages for com. scale purification of viruses. Adenovirus serotype 2 was purified from lysed 293 cells using diatomaceous earth as the filtration aid. Metal salts were used to optimize DNA binding to diatomaceous earth.
AN 2001:489584 HCAPLUS <<LOGINID::20101122>>
DN 135:73702
TI Method using filtration aids for the separation of virus vectors from nucleic acids and other cellular contaminants
IN McNeilly, David S.; Osburn, William O.
PA Genzyme Corporation, USA
SO PCT Int. Appl., 33 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001048155	A2	20010705	WO 2000-US34953	20001220 <--
	WO 2001048155	A3	20020103		
	W: AU, CA, JP				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR				
	CA 2395820	A1	20010705	CA 2000-2395820	20001220 <--
	US 20010043916	A1	20011122	US 2000-742247	20001220 <--
	EP 1246904	A2	20021009	EP 2000-993630	20001220 <--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY, TR				
	JP 2003518380	T	20030610	JP 2001-548668	20001220 <--
PRAI	US 1999-173584P	P	19991229 <--		
	WO 2000-US34953	W	20001220 <--		

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 7 OF 17 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Biomolecular processor for isolation and purification of nucleic acids
AB A process and apparatus are described for isolating and purifying nucleic acids and other target mols. directly from blood, plasma, urine, cell cultures and the like by totally automated means, without centrifugation, aspiration or vacuum. After mixing and heating a nucleic acid containing sample with lysis reagent in an environmentally isolated compartment, nucleic acids are absorbed onto a binding filter and eluted in a small volume using heated elution reagent. A preferred embodiment purifies nucleic acids and automatically detects target sequences from a sample of fresh blood. Another embodiment purifies target mols. from a multitude of samples held in microtiter plates. Test kits for each embodiment include disposable isolation and detection devices and associated reagents.
AN 1998:672693 HCAPLUS <<LOGINID::20101122>>

DN   129:272649
OREF 129:55525a,55528a
TI   Biomolecular processor for isolation and purification of nucleic acids
IN   Fields, Robert E.
PA   USA
SO   PCT Int. Appl., 38 pp.
     CODEN: PIXXD2
DT   Patent
LA   English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9842874	A2	19981001	WO 1998-US6029	19980323 <--
	WO 9842874	A3	19981223		
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW				
	RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	AU 9867790	A	19981020	AU 1998-67790	19980323 <--
	EP 972080	A2	20000119	EP 1998-913175	19980323 <--
	EP 972080	B1	20050323		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	AT 291637	T	20050415	AT 1998-913175	19980323 <--
	US 20030027203	A1	20030206	US 2002-243521	20020912 <--
PRAI	US 1997-41237P	P	19970324 <--		
	WO 1998-US6029	W	19980323 <--		
	US 1999-381603	B1	19990922 <--		

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OSC.G   8   THERE ARE 8 CAPLUS RECORDS THAT CITE THIS RECORD (8 CITINGS)
RE.CNT 4   THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
              ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 8 OF 17 HCAPLUS COPYRIGHT 2010 ACS on STN
TI   Reagent kit for the preparation of nucleic acids.
AB   A method and kit are disclosed for the separation and isolation of DNA-containing
     and RNA-containing fractions from biol. cells present in, e.g., whole blood, cell cultures, or cell suspensions, in which the cells are treated with Solution I which causes lysis of the cells but does not affect the cell nuclei, followed by centrifugation to sep. the DNA-containing cell nuclei from the RNA-containing supernatant. Solution I contains preferably a detergent, a reducing agent, and optionally an RNase inhibitor and a vanadyl ribonucleoside complex besides other usual buffer substances and additives. After separation of the DNA-containing cell nuclei from
     the RNA-containing solution, the latter is treated with Solution II which contains a denaturant, a detergent, and other common buffer components. The RNA then can be obtained by known methods such as by using a suitable RNA-binding matrix. Application of the method in disease diagnosis is emphasized.
AN   1997:603525 HCAPLUS <<LOGINID::20101122>>
DN   127:187876
OREF 127:36365a
TI   Reagent kit for the preparation of nucleic acids.
IN   Michel, Uwe; Rau, Andreas; Rieckmann, Peter
PA   Michel, Uwe, Germany; Rau, Andreas

SO Ger. Offen., 5 pp.
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI DE 19607202	A1	19970828	DE 1996-19607202	19960226 <--
PRAI DE 1996-19607202		19960226 <--		

OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)
RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 9 OF 17 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Methods and compositions for isolating nucleic acids
AB Compns. and methods are disclosed for isolating nucleic acids from biol. tissues and cells (including tumor cells) and for tissue/cell solubilization for other mol. biol. uses, wherein the compns. comprise, in part, novel combinations of chaotropic agents and aromatic alcs. which act synergistically to effect better tissue/protein solubilization. The inventive compns. further include aprotic solvents for deactivation of RNases and denaturization of proteins, as well as detergents for enhancing cell lysis and nucleoprotein dissociation The inventive methods also comprise the use of a centrifuge, a solid-support matrix, and a microporous membrane for final isolation of the precipitated nucleic acids, resulting in high yield and purity of the precipitated nucleic acid.
AN 1997:400479 HCAPLUS <<LOGINID::20101122>>
DN 127:78238
OREF 127:14901a,14904a
TI Methods and compositions for isolating nucleic acids
IN Wiggins, James C.
PA USA
SO U.S., 15 pp.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 5637687	A	19970610	US 1993-115184	19930831 <--
PRAI US 1993-115184		19930831 <--		

OSC.G 13 THERE ARE 13 CAPLUS RECORDS THAT CITE THIS RECORD (13 CITINGS)
RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 10 OF 17 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Method for the simultaneous isolation of genomic DNA and highly purified total RNA
AB The invention concerns the rapid simultaneous isolation of genomic DNA and cellular total RNA, free from genomic DNA, from different starting materials (e.g., <105 cells or <1 mg tissue sample). Applications of the method are in mol. biol., biochem., genetic techniques, medicine, veterinary medicine, and related areas. In the method, the DNA- and RNA-containing materials are lysed with a special buffer, the lysate for isolation of the genomic DNA is incubated with a nonporous highly-dispersed SiO2 support, the support with the bound DNA is separated by centrifugation and washed with buffer solution, and then the DNA is released from the support with a low-salt-concentration buffer. The lysate, after separation of the support-fixed DNA, is mixed with specified

amts. of PhOH, CHCl3, and NaOAc, and after phase separation, the cellular total RNA is precipitated out of the aqueous phase by addition of iso-PrOH. Lysis is done with buffers containing chaotropic salts of higher ionic strength. Lysis of the material and binding of genomic DNA to the support are done with the same buffer. An example is given of the isolation of DNA and total RNA from a eukaryotic monolayer cell culture with about 5 + 106 cells.

AN 1996:563526 HCAPLUS <<LOGINID::20101122>>
DN 125:190022
OREF 125:35466h,35467a
TI Method for the simultaneous isolation of genomic DNA and highly purified total RNA
IN Hillebrand, Timo; Bendzko, Peter; Peters, Lars-Erik
PA Invitek Gmbh, Germany
SO Ger. Offen., 4 pp.
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI DE 19506887	A1	19960822	DE 1995-19506887	19950217 <--
DE 19506887	C2	19991014		

PRAI DE 1995-19506887 19950217 <--
OSC.G 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)
RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 11 OF 17 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Transcription in vitro of Tetrahymena class II and class III genes
AB A method for preparation of transcriptionally active nuclear exts. from the ciliated protozoan Tetrahymena thermophila is described. Cells were lysed in the presence of gum arabic, and nuclei were further purified in the presence of Ficoll 400. Highly concentrated nuclear exts. were prepared by ultracentrifugation of nuclei in a buffer containing potassium glutamate and spermidine. These exts. supported accurate transcription initiation of T. thermophila class II and IIII genes. Using the histone H3-II gene as a template, the authors demonstrated that physiol. induced changes in transcriptional activity of the nuclear extract in vitro. By electrophoretic mobility shift assays, five conserved sequence elements in the upstream region of the histone H3-II gene were shown specifically to bind proteins in exts. from exponentially growing as well as from starved cells, and by UV crosslinking the authors further characterized the specific binding of two proteins to an oligonucleotide containing a conserved CCAAT box motif. Transcription competition expts. showed that addition of this oligonucleotide decreased transcription significantly. Competition with oligonucleotides corresponding to the two proximal conserved sequence elements almost completely abolished transcription of the H3-II gene suggesting that binding of transacting factors to these elements is crucial for initiation of transcription.
AN 1995:487043 HCAPLUS <<LOGINID::20101122>>
DN 123:104121
OREF 123:18347a,18350a
TI Transcription in vitro of Tetrahymena class II and class III genes
AU Larsen, Leif K.; Kristiansen, Karsten
CS Dep. Mol. Biol., Univ. Odense, Odense, DK-5230, Den.
SO Journal of Biological Chemistry (1995), 270(13), 7601-8
CODEN: JBCHA3; ISSN: 0021-9258
PB American Society for Biochemistry and Molecular Biology
DT Journal

LA English
OSC.G 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)

L14 ANSWER 12 OF 17 HCAPLUS COPYRIGHT 2010 ACS on STN
TI A rapid, high capacity nucleic acid based assay in chaotropic conditions for the determination of infectious agents
AB A method for carrying out a sandwich hybridization using a sample in a chaotropic solution is described. The sample and capture probe are mixed in the chaotropic solution, diluted and hybridized and the hybridization products hybridized with an immobilized binding partner and the degree of hybridization quantitated. The method is particularly useful for the detection of pathogens in biol. samples. MT-2 cells infected with HIV-1 were lysed by suspending them in guanidine thiocyanate 5, EDTA 0.1 M, dextran sulfate 10% and the lysates mixed with HIV-1 RNA transcripts and a biotinylated capture probe, diluted to 3 M guanidine thiocyanate and incubated overnight at 37° followed by dilution to 1 M guanidine thiocyanate and incubation in streptavidin-coated microtiter plates. After hybridization and washing the wells were incubated with an alkaline phosphatase-labeled probe in 4+SSC and the bound enzyme quantified. The lower limit of detection was 107 copies of the RNA (0.3 ng).
AN 1993:664161 HCAPLUS <<LOGINID::20101122>>
DN 119:264161
OREF 119:47085a,47088a
TI A rapid, high capacity nucleic acid based assay in chaotropic conditions for the determination of infectious agents
IN Bacheler, Lee Terry; Miller, Jeffrey Allan; Sharpe, Thomas Ray; Stone, Barry Allen
PA du Pont de Nemours, E. I., and Co., USA
SO PCT Int. Appl., 81 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9320234	A1	19931014	WO 1993-US2794	19930325 <--
	W: CA, JP				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	US 5726012	A	19980310	US 1994-231942	19940421 <--
PRAI	US 1992-860827	A	19920331 <--		

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OSC.G 6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD (6 CITINGS)
RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 13 OF 17 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Preparation of DNA and RNA from Trypanosoma brucei
AB Three protocols are given in this chapter, one for the preparation of DNA and two for the preparation of total RNA from T. brucei. The preparation of DNA involves the lysis of cells under conditions that result in little or no degradation of the DNA, and the removal of all DNA binding proteins such as histones from the DNA. RNA and proteins are then degraded by the sequential addition of hydrolytic enzymes followed by solvent extraction The DNA is recovered by ethanol precipitation after dialysis. Two methods are described for the preparation of RNA. The first is suitable for large scale prepns. and produces a very good yield. The cells are lysed under extremely denaturing conditions, DNA is sheared by phys. agitation, and protein is removed by solvent extraction The nucleic acids are recovered by ethanol precipitation, and then the RNA

is selectively precipitated using lithium chloride. The second method relies on RNA having a greater buoyant d. than DNA and protein. Cells are lysed in guanidine thiocyanate and the RNA pelleted through a cesium trifluoroacetate cushion; protein and DNA remain above the cushion. RNA with a minimal amount of degradation is obtained using this method, and it is more suitable for smaller nos. of cells and if a large number of different samples have to be prepared in parallel. It is worth considering the yield of DNA or RNA from a given number of cells. T. brucei has a haploid genome size of 3 + 107 base pairs. The cells are diploid, so the expected yield of DNA from 1 + 1010 cells is roughly 660 μg. The yield of RNA varies from 1-2.5 mg/1010 cells, and tends to be slightly lower with the second method. Both methods of RNA purification yield RNA suitable for further purification of mRNA by affinity chromatog.

AN 1993:663612 HCAPLUS <<LOGINID::20101122>>
DN 119:263612
OREF 119:46965a,46968a
TI Preparation of DNA and RNA from Trypanosoma brucei
AU Carrington, Mark
CS Dep. Biochem., Univ. Cambridge, UK
SO Methods in Molecular Biology (Totowa, NJ, United States) (1993), 21(Protocols in Molecular Parasitology), 101-11
CODEN: MMBIED; ISSN: 1064-3745
DT Journal
LA English
OSC.G 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)

L14 ANSWER 14 OF 17 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Integration host factor activates the Ner-repressed early promoter of transposable Mu-like phage D108
AB The lytic-lysogenic switch in transposable, Mu-like bacteriophage D108 is governed by two divergent and slightly overlapping transcription units originating from the Pe and Pc promoters. DNase I footprinting and in vivo mutational anal. suggest that lysogeny is maintained by c-repressor occupancy of the O2 operator, which precludes RNA polymerase from binding to Pe. Lytic development is controlled by the Ner repressor, which binds to a site sym. situated between the converging promoters and, in the absence of other factors, prevents RNA polymerase from binding to either Pc or Pe. DNase I protection and potassium permanganate hypersensitivity in the presence of integration host factor (IHF), which binds and alters the DNA structure upstream of Pe, revealed that RNA polymerase was able to bind Pe irresp. of the Ner·DNA-bound complex, and partially unwind the Pe -10 region. Ner repression of Pe transcription in vitro was significantly more effective in the absence of IHF. Using a cloned D108 early region-lacZ fusion in IHF-deficient and -proficient backgrounds, (1) this host factor was shown to affect ner-repressed Pe in vivo, and (2) a system for isolating mutants in the regulatory genes and sites controlling this genetic switch was generated. D108 lytic growth is proposed to occur through IHF-mediated activation of the phage Ner-repressed early operon.
AN 1992:484599 HCAPLUS <<LOGINID::20101122>>
DN 117:84599
OREF 117:14635a,14638a
TI Integration host factor activates the Ner-repressed early promoter of transposable Mu-like phage D108
AU Kukolj, George; DuBow, Michael S.
CS Dep. Microbiol. Immunol., McGill Univ., Montreal, QC, H3A 2B4, Can.
SO Journal of Biological Chemistry (1992), 267(25), 17827-35
CODEN: JBCHA3; ISSN: 0021-9258
DT Journal
LA English

OSC.G 8 THERE ARE 8 CAPLUS RECORDS THAT CITE THIS RECORD (8 CITINGS)

L14 ANSWER 15 OF 17 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Preparation and characterization of yeast nuclear extracts for efficient RNA polymerase B (II)-dependent transcription in vitro
AB A reproducible method for the preparation of nuclear exts. from the yeast Saccharomyces cerevisiae that support efficient RNA polymerase B (II)-dependent transcription is presented. Exts. from both a crude nuclear fraction and Percoll-purified nuclei are highly active for site-specific initiation and transcription of a G-free cassette under the Adenovirus major late promoter. At optimal extract concns. transcription is at least 5 times more efficient with the yeast exts. than with HeLa whole cell exts. The transcriptional activity is sensitive to α-amanitin and to depletion of factor(s) recoognizing the TATA-box of the promoter. The in vitro reaction showed maximal activity after 45 min, was very sensitive to Cl-, but was not affected by high concns. of potassium. The efficiency of in vitro transcription in nuclear exts. is reproducibly high when spheroplasting is performed with a partially purified β 1,3-glucanase (lyticase). Therefore, a simplified method to isolate the lyticase from the supernatant of Oerskovia xanthineolytica is also presented.
AN 1991:76352 HCAPLUS <<LOGINID::20101122>>
DN 114:76352
OREF 114:12903a,12906a
TI Preparation and characterization of yeast nuclear extracts for efficient RNA polymerase B (II)-dependent transcription in vitro
AU Verdier, J. M.; Stalder, R.; Roberge, M.; Amati, B.; Sentenac, A.; Gasser, S. M.
CS Serv. Biochim., Cent. Etud. Nucl. Saclay, Gif-sur-Yvette, F-91191, Fr.
SO Nucleic Acids Research (1990), 18(23), 7033-9
CODEN: NARHAD; ISSN: 0305-1048
DT Journal
LA English
OSC.G 12 THERE ARE 12 CAPLUS RECORDS THAT CITE THIS RECORD (12 CITINGS)

L14 ANSWER 16 OF 17 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Isolation and purification of nucleic acids from biological samples by anion-exchange chromatography
AB DNA and/or RNA are purified from biol. samples, e.g. for identification of pathogens, by binding to an anion exchanger, preferably in the Cl- form, in a column and eluting with a halide (preferably Cl-) salt, where adsorption, washing, and elution are carried out in solns. of successively increasing halide salt concentration This method is useful for separation of cellular or viral nucleic acids from other cell or virus components such as proteins, pigments, and especially carboxylated and sulfated mucopolysaccharides. A suspension of feces in NaCl/Na2EDTA to be examined for microorganisms was lysed with proteinase K, SDS, and urea, heated to 50-60°, diluted, and loaded on a stacked column system composed of a weakly basic and a strongly basic anion exchanger (TSK Fractogel DEAE-650S and QAE Glycophase Glass, resp.) equilibrated with 0.3 M NaCl. The columns were washed with 0.3 M NaCl. DNA was eluted from the upper column into the lower one with 0.5 M NaCl-17% MeOH, and was eluted from the lower column with 0.8 M NaCl-17% MeOH. Sulfated mucopolysaccharides remained bound in the upper column, and carboxylated mucopolysaccharides washed out of the lower column with the 0.5 M NaCl-17% MeOH.
AN 1989:150938 HCAPLUS <<LOGINID::20101122>>
DN 110:150938
OREF 110:24877a,24880a
TI Isolation and purification of nucleic acids from biological samples by anion-exchange chromatography

IN Seligson, David B.; Shrawder, Elsie J.
PA Molecular Biosystems, Inc., USA
SO Eur. Pat. Appl., 15 pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 270017	A2	19880608	EP 1987-117540	19871127 <--
	EP 270017	A3	19900321		
	R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE				
	US 4935342	A	19900619	US 1986-936163	19861201 <--
	IL 84634	A	19911121	IL 1987-84634	19871127 <--
	NO 8704979	A	19880602	NO 1987-4979	19871130 <--
	NO 169541	B	19920330		
	NO 169541	C	19920708		
	AU 8781927	A	19880616	AU 1987-81927	19871130 <--
	AU 600997	B2	19900830		
	CA 1313359	C	19930202	CA 1987-553135	19871130 <--
	DK 8706316	A	19880602	DK 1987-6316	19871201 <--
	DK 167616	B1	19931129		
	JP 63154696	A	19880627	JP 1987-304407	19871201 <--
	JP 2564335	B2	19961218		
PRAI	US 1986-936163	A	19861201 <--		

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OSC.G 24 THERE ARE 24 CAPLUS RECORDS THAT CITE THIS RECORD (29 CITINGS)

L14 ANSWER 17 OF 17 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Fractionation of L-cell chromatin into DNA, RNA, and protein fractions on cesium sulfate equilibrium density gradients
AB Fractionation of chromatin into DNA, RNA, and total chromatin proteins was described. By isopycnic gradient centrifugation of chromatin prepns. in Cs2SO4 solns. containing dimethylsulfoxide and Na sarcosyl it was possible to obtain highly-purified fractions of these components. The method gave a very high yield of these chromatin fractions unlike some other methods, in which irreversible binding to columns occurred. Highly concentrated fractions were obtained, which after a simple dialysis step, could be analyzed by polyacrylamide gel electrophoresis. Nuclei from L-929 cells were isolated by a method involving citric acid or by a method using a nonionic detergent. The yields of DNA obtained by both methods were compared. Chromatin was isolated from purified nuclei (prepared in either of the above ways) in 2 different ways. In one method, chromatin was extracted from nuclei with M NaCl. The 2nd method involved fractionation of lysed nuclei in sucrose and metrizamide solns. The yields of DNA obtained by both methods were compared. There appeared to be little nuclear membrane contamination of any of these chromatin prepns. A preliminary anal. of L-929 cell chromatin total RNA and protein fractions on polyacrylamide and agarose gels was made. Both fractions appeared to be quite complex with a wide spectrum of subcomponents of differing S values.
AN 1975:1822 HCAPLUS <<LOGINID::20101122>>
DN 82:1822
OREF 82:335a,338a
TI Fractionation of L-cell chromatin into DNA, RNA, and protein fractions on cesium sulfate equilibrium density gradients
AU Monahan, John J.; Hall, Ross H.
CS Health Sci. Cent., McMaster Univ., Hamilton, ON, Can.
SO Analytical Biochemistry (1974), 62(1), 217-39
CODEN: ANBCA2; ISSN: 0003-2697
DT Journal

LA English